DOCUMENT RESUME

ED 141 043 32 RC 009 989

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TITLE Choices Not Circumstances: An Educational Needs Assessment for the Children of Arizona's Migratory Agricultural Workers. Volume II: Migrant Population and Programs - Characteristics and Trends.
INSTITUTION Lewis (D. A.) Associates, Inc., Clinton, Md.
SPONS AGENCY Arizona State Dept. of Public Instruction, Phoenix. Div. of Migrant Child Education.; Bureau of Elementary and Secondary Education (DHEW/OE), Washington, D.C. Div. of Compensatory Education.
PUB DATE May 77
NOTE 178p.; Related documents include RC 009 988-90

EDRS PRICE MF-$0.83 HC-$10.03 Plus Postage.
DESCRIPTORS Agricultural Laborers; Comparative Analysis; Demography; Economic Development; Educational Needs; Employment Trends; Enrollment; Environmental Influences; Expectation; *Futures (of Society); Interstate Workers; Legislation; *Migrant Education; *Migrant Workers; *Needs Assessment; Political Influences; *Population Trends; Program Content; Program Effectiveness; Social Indicators; *Socioeconomic Influences; Technological Advancement
IDENTIFIERS *Arizona

ABSTRACT

Arizona's migrant farmworker population was examined to determine the recent changes in its demographic characteristics, and changes in worker characteristics that could be anticipated by 1980 and their implications for educative and supportive services to migrant children between 1977 and 1980. Information was also obtained on migrant student enrollment patterns; farmworker mobility; the impact of agricultural technology on migrant farmworkers; the political and environmental factors which have an impact on migrants; public programs affecting migrant families; the difficulties encountered by the programs in implementing their plans; general difficulties encountered in the areas of health, housing, legal and economic security, employment, and training; suggested legislation that may help eliminate some of the difficulties; and the relationship between societal conditions and the identified needs of migrant students in 1980. Data analyses included a content analysis of voluminous materials on the programs affecting migrant families; and a Delphi exercise on societal conditions in 1980 involving 9 expert consultants in 3 interactive rounds. Findings included: migrants suffered particularly from lack of communication skills; there was a lack of a career ladder within agriculture for migrants; children were remaining in school for significantly longer periods; and larger families were more likely to remain active in migrant agriculture. (NQ)

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CHOICES NOT CIRCUMSTANCES

AN EDUCATIONAL NEEDS ASSESSMENT FOR THE CHILDREN OF ARIZONA'S MIGRATORY AGRICULTURAL WORKERS

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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VOLUME II

MIGRANT POPULATION AND PROGRAMS: CHARACTERISTICS AND TRENDS

MAY, 1977

CAROLYN WARNER, SUPERINTENDENT, ARIZONA DEPARTMENT OF EDUCATION

RC009989

This report was prepared for the Arizona Migrant Education Program by D. A. LEWIS ASSOCIATES, Inc., a metropolitan Washington, D. C.-based research, consulting, and publishing company. The firm has performed client assignments for federal agencies, over twenty states, and private organizations, including such research as comprehensive needs assessments for migrant education in two states, analysis of the movements of migrant pupils for five states, evaluation of the educational and economic impact of preschool day care centers, two separate benefits analyses of the Migrant Student Record Transfer System, and assessment of the functioning of migrant health programs. In addition to its research activities, the firm has published OLÉ II, an oral language assessment manual; a manual on Minimum Objectives for Teaching Basic Skills in Communications, Reading, and Mathematics; and The Migrant Educator, the national news publication for educators of migrant children.

The director of this project was JOHN D. HUSS whose professional specialty is the management improvement of public programs. Mr. Huss has been a government administrator and consultant for over fifteen years. He has directed studies ranging from a few person-days to twenty-five person-years of effort, including numerous organization and management analyses and program evaluations. On a similar comprehensive needs assessment previously conducted by D. A. Lewis Associates, Inc., for the State of Florida, he participated as a task leader and project coordinator; and he is currently in charge of a management and technical assistance contract for the U. S. Department of Justice on the illegal-alien situation in the United States. Mr. Huss has authored numerous Government reports and issuances, contributed to professional publications, and is an editor of an international bimonthly journal dedicated to advancing the state-of-the-art in futural research.

VOLUME II

MIGRANT POPULATION AND PROGRAMS: CHARACTERISTICS AND TRENDS

Prepared By

D. A. LEWIS ASSOCIATES, INC.

FOR THE STATE OF ARIZONA DEPARTMENT OF EDUCATION

UNDER CONTRACT NUMBER A. G. 1305

FUNDED THROUGH PUBLIC LAW 89-750

TITLE I MIGRANT

MAY 1977

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SECTION A

POPULATION CHARACTERISTICS AND TRENDS

CHAPTER 1

INTRODUCTION

This section presents the final results of Task 1 of the design and implementation of an educational needs assessment for migrant students in the State of Arizona. The three basic purposes of this task were to:

- Determine the changes in characteristics of the Arizona migrant population in recent years,
- Determine the changes in worker characteristics that could be anticipated by 1980, and
- Determine the implications of the anticipated changes for educative and supportive services to migrant children between 1977 and 1980.

Each of the above areas is discussed in detail in this task report. The results presented have some significant implications for the Arizona Migrant Education Program through the remainder of this decade.

The remainder of this chapter describes the data sources that D. A. Lewis Associates reviewed and utilized in the preparation of this report and describes separate studies which were undertaken as special analyses in this task.

The next chapter of this report presents a complete description of the Arizona migrant farmworker population. Included in this chapter are descriptions of population and

family characteristics and analyses of the educational attainment, work experience, and settle-out plans of migrant workers. This chapter presents the most up-to-date, complete information available on migrant farmworkers within the State of Arizona.

Separate chapters have been included in this report discussing data validity and comparisons and migrant farmworker demographic changes. These discussions present interstate comparisons between Arizona and Florida migrant farmworker populations and describe the changes that have occurred in the Arizona farmworker population.

Analyses of migrant student enrollment patterns and migrant family needs are presented in separate sections. These sections review the enrollment of migrant students while in the stream and describe the needs which migrant families have identified as being critical.

Separate chapters have been included describing migrant farmworker mobility, the impact of agricultural technology on migrant farmworkers, and the political and environmental factors which impact on migrant farmworkers in Arizona. These chapters describe in some detail the societal realities which migrant farmworkers face and allow an understanding of the inevitable changes that will occur in order that programs may be more adequately tailored to the needs of the migrant population.

The last chapter in this section deals with the implications for education of all of the preceding chapters in this

task. Information of both a quantitative and qualitative nature are presented in an attempt to allow the Arizona Migrant Education Program decisionmakers to better anticipate the needs of the population by 1980.

Data Sources

A broad variety of data sources were reviewed by the project team in addressing this task. Among the more significant ones that were reviewed are:

1. A series of reports produced by the Economic Research Service of the U. S. Department of Agriculture. These reports entitled Hired Farmworking Force enabled D. A. Lewis Associates to develop a national overview of the migrant farmworker population. While this data source has severe limitations when applied directly to the Arizona migrant farmworker population, it did provide information of a general nature.
2. 1974 Census of Agriculture. Preliminary data are now available on the 1974 Census of Agriculture. Unfortunately, the data are just that — preliminary — and are subject to subsequent revisions by the Bureau of the Census. They were reviewed, however, to determine their applicability to this study.
3. Migrant Student Record Transfer System. The data contained in the Migrant Student Record Transfer System (MSRTS) were also reviewed for this task. While these

data are highly detailed in terms of the types and quantity of information contained, all of these data relate directly to migrant students. These data, therefore, do not apply, except indirectly, to the migrant farmworker family and thus were not highly applicable for this task.

4. In-Season Farm Labor Reports. The In-Season Farm Labor Report (ES223) is a basic document used to provide information on a semimonthly basis on the number of migrant farmworkers employed. The data contained therein are estimates only, and the accuracy of the estimates vary significantly from reporting agent to reporting agent. While the data are not likely to be valid, they are likely reliable (a fine distinction) for some evaluative purposes. They were not, however, of sufficient quality to warrant inclusion in this task report.

5. The Arizona Evaluation Report. A recent study completed by D. A. Lewis Associates for the Migrant Education Program of the State of Arizona contains some significant data and analyses which are relevant to this task. Thus, some of the information that was collected and reported on in that report has been utilized for validation and analysis purposes.

6. Migrant Farmworker Questionnaire. A migrant farmworker questionnaire was designed by D. A. Lewis Associates

to collect basic data concerning the migrant farmworker and his family. Types of information that were collected by this instrument include demographic, educational, work-related, and settle-out plans for migrant farmworkers. In addition to this data base, some additional information was collected on worker likes and dislikes, worker travel patterns, migrant family needs, and migrant child educational patterns. The information on this questionnaire was collected by direct interview with a sample of 233 migrant farmworkers in three different geographic regions within the State of Arizona. Workers were interviewed at their homes and schools by a small number of interviewers selected and trained by a coordinator within each of the districts. The result of this questionnaire is a compilation of the most recent, useful, and valid information on migrant farmworkers within the State of Arizona.

Special Studies Completed

In performing the data collection and analyses for this task, it was determined that two separate substudies were necessary. Data for these substudies were drawn from information available through the U. S. Department of Agriculture and the U. S. Department of Labor. The results of these two substudies were described in a previous progress report and will be reviewed here.

The two basic approaches which have been taken, traditionally, to an analysis of worker behavior are the economic approach and the behavioral approach. Thus, it was necessary to conduct an investigation to determine which of two basic approaches is more applicable to the Arizona migrant farmworker population. The behavioral approach typically addresses factors such as the internal psychological and motivational aspects that affect worker behavior. These models are highly interesting in a research sense, but do not appear to be applicable to this population. One of the basic reasons for the inapplicability of this model is that the validity of the behavioral approach is suspect when applied to migrant farmworkers given existing data. In addition, most of the behavioral studies that have been conducted, especially regarding individual career choice and migration decisionmaking, are based on a middle-class socioeconomic group. While migrant farmworkers, to some extent, act similarly to middle-class urban dwellers, there is reason to believe that there are enough basic differences in their behavior to result in a dismissal of this model. The economic model, on the other hand, is one which focuses on worker behavior from a view that is external to the worker himself. These external factors include factors such as wage rates, unemployment rates, the demand for labor, etc. On reviewing both of the models, it was determined that the economic model has a much greater applicability

to the Arizona migrant farmworker population and, thus, is the one that was utilized for this study.

The second substudy that was conducted surrounds the controversy over "push" versus "pull" migration. In the case of "push" migration, it is felt that it is factors in the home State which "push" migrant workers out of the State into the stream. Factors which are considered important in the "push" model include the local unemployment rate in the home State, the climate, local wage rates, etc. In the "pull" model by way of contrast, it is believed that workers are drawn out of the State to the work sites within the stream. The factors which are important here include the wage rates in the receiving States, local unemployment rates in these States, the size of the harvest, etc. While it is obvious that any migration decision is a combination of both "push" and "pull" phenomena, the substudies conducted by D. A. Lewis Associates in conjunction with this needs assessment confirmed the findings of the needs assessment completed for Florida (see: An Educational Needs Assessment for the Children of Florida's Migratory Agricultural Workers, D. A. Lewis Associates, Inc., 1976) and resulted in the determination that it is "pull" phenomena that are most relevant.

CHAPTER 2

DESCRIPTION OF THE MIGRANT FARMWORKER POPULATION

Demographics

Population Characteristics — This portion of the Task 1 report presents a complete description of the Arizona migrant farmworker population as determined by the farmworker questionnaire described in the previous chapter. Unless otherwise specified, all data presented are based on a sample of 233 migrant farmworkers throughout the State. The basic description of the migrant farmworker population for Arizona is presented in Figure 1. In terms of the racial/ethnic composition of Arizona-based migrant farmworkers, the data report what one would expect. The vast majority of the farmworkers are Mexican-American. The next largest group is Other White (Anglo) although this group is only one-tenth the size of the Mexican-American work force. The remaining three percent of the migrant workers include American Indian, Black, and Oriental and will be grouped together in the remainder of this report as "Other."

The analytic uses to which the data on sex may be put are limited. What is reported in Figure 1 is the sex of the individual with whom the data collector obtained information on the migrant farmworker survey. Thus, this data reports only the sex of those interviewed and not the sex of all migrant farmworkers in Arizona.

FIGURE 1

CHARACTERISTICS OF THE MIGRANT FARMWORKER POPULATION INTERVIEWED
Number (percent)

RACIAL/ETHNIC GROUP		
American Indian	4	(1.7)
Black	1	(0.4)
Mexican-American	207	(88.8)
Oriental	2	(0.9)
Other White	19	(8.2)
Total	233	(100.0)
SEX:		
Male	194	(83.3)
Female	39	(16.7)
Total	233	(100.0)
FAMILY STATUS:		
No Children	4	(1.7)
1 Child	7	(3.0)
2 Children	29	(12.4)
3 Children	38	(16.3)
4 Children	43	(18.5)
5 Children	39	(16.7)
6 Or More Children	73	(31.3)
Total	233	(100.0)
CREW MEMBERSHIP:		
Crew Member	69	(29.6)
Not Crew Member	159	(68.2)
Not Reported	5	(2.1)
Total	233	(100.0)

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

The information presented in Figure 1 on family status is significantly different from that for the general population, typical farm families, or other migrant farmworker populations. What can be seen from this information is that almost one-third of the migrant farmworkers interviewed were members of a family with six or more children. The impact of this family size on disposable income per capita as well as on the migrant education program is enormous. Resources which are typically scarce for both families and social programs are spread even more thinly because of the very large family size.

Early research performed by D. A. Lewis Associates indicated that the extent of crew membership among migrant farmworkers in the State of Arizona was extremely low. These findings were substantiated by discussions with knowledgeable state officials who indicated that the crew system involved fewer than ten percent of Arizona's migrant farmworkers. These beliefs, however, were not borne out by the data collected in the survey. In these data, approximately 30 percent of the migrant farmworkers interviewed indicated they were members of a crew during the 1976 season. While it is possible that a portion of these individuals were mistaken in terms of what they identified as a crew, it is likely that a significant number are, in fact, members of crews — perhaps with crew leaders that have not filed with the U. S. Department of Labor under the Crew Leader Registraction Act. Further analysis of this

situation should be conducted in order to determine the extent to which crew membership is relatively widespread, as contact with migrant farmworkers is made relatively more easy and social services may be provided more readily when needed by the workers or their families through the crew system.

Family Characteristics — As was discussed briefly in the preceding section, the number of children per worker family among Arizona migrant farmworkers is quite high. Data on this can be seen in Figure 2. There is an overall average of 4.65 children per worker family in the population, well above that of any other subgroup surveyed by D. A. Lewis Associates to date. The number of children per family does not vary to a great extent when racial/ethnic groups are separated. The difference in family size is less than one child — a difference far less than found for other populations. These data are further displayed in Figure 3 which indicates the percent of families of each racial/ethnic group with the indicated number of children. What may be seen in this table is that while the overall number of children per worker family is relatively stable among racial/ethnic groups, there is a major difference in the distribution of families. As may be seen, the greatest percentage of Mexican-American families has six or more children, while the greatest percentage of Other White and Other groups is three children.

Educational Attainment — Figure 4 presents a summary of information collected concerning the educational attainment of

FIGURE 2

NUMBER OF CHILDREN PER WORKER FAMILY

	Children Per Worker Family
AVERAGE	4.65
RACIAL/ETHNIC GROUP	
Mexican-American	4.72
Other White	3.89
Other	4.57

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

FIGURE 3

FAMILY STATUS
(Percent of Families with Indicated Number of Children)

	Number of Children						
	0	1	2	3	4	5	6 or More
RACIAL/ETHNIC GROUP							
Mexican-American	2	3	11	14	19	18	33
Other White	—	—	26	37	11	11	16
Other	—	—	14	43	14	-	29
Total	1.8	2.7	12.3	16.7	18.2	16.9	31.5

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

FIGURE 4

EDUCATIONAL ATTAINMENT OF MIGRANT FARMWORKERS

	Last Grade Completed	Age At Leaving School
AVERAGE	4.83	13.04
RACIAL/ETHNIC GROUP		
Mexican-American	4.55	12.73
Other White	8.94	14.86
Other	5.71	16.50
SEX:		
Male	4.74	13.14
Female	5.29	12.65
FAMILY STATUS:		
No Children	4.00	15.50
1 Child	4.57	14.20
2 Children	5.81	13.62
3 Children	6.56	13.90
4 Children	4.66	13.38
5 Children	4.79	12.69
6 Or More Children	3.45	11.90

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

Arizona migrant farmworkers. As may be seen, educational levels are appallingly low. The average farmworker has completed only 4.83 years of education, leaving school at age 13. There are some substantial differences among the various racial/ethnic groups in terms of the amount of education received. While the level of education is extremely low for all groups, the Mexican-Americans surveyed averaged approximately four and one-half years less schooling than Other Whites and one year less than all Others. Additionally, there appears to be a strong, direct correlation between the level of education of an individual and family size, a factor which is true whether last grade completed or age at leaving school is the variable in question. As may be seen, those remaining in school longer and completing more years of education are less likely to have a large family. In part, this may be the result of statistical artifact — that artifact being that younger workers have remained in school somewhat longer than older workers, and these same younger workers have not yet completed family formation.

Crew Membership — Migrant farmworkers who leave the State of Arizona may travel in the stream in one of two ways — either as crew member or as an individual farmworker. To the extent that migrant workers travel as crew members, they are relatively more easy to locate and serve in that they may be directly contacted through a crew leader. According to the data collected by D. A. Lewis Associates in its migrant farmworker survey,

approximately 30% of all Arizona-based migrant farmworkers are members of crews. As discussed previously, a portion of this number may be a result of a misinterpretation on the part of the farmworker surveyed as to the official definition of a crew, but some substantiation for the data collected comes from the information presented in the table which shows that families with no children or only one child are more likely to be members of crews than are larger families. As may be seen in Figure 5, there are substantial differences in crew membership along racial lines. Mexican-Americans are considerably more likely to be crew members than are Other Whites or Other.

Property Ownership and Location — Figure 6 presents data on property ownership by various categories of migrant farmworkers. As may be seen, almost one-half of the Arizona-based migrant farmworkers own property (land, house, etc.). The data indicate that there is a significant difference in propensity to own property among the major racial/ethnic groups. As may be seen, Mexican-Americans are almost ten times as likely to own property as all other racial/ethnic groups combined. One interesting fact that may be observed from Figure 6 is that both very small and very large families are significantly more likely to own property than medium-size families. In the case of small families, the likely cause is related to higher disposable income per capita, while in the case of larger families,

FIGURE 5

CREW MEMBERSHIP
Number (percent)

	Crew Members		Not Crew Members	
AVERAGE	69	(30.3)	159	(69.7)
RACIAL/ETHNIC GROUP				
Mexican-American	65	(32.0)	138	(68.0)
Other White	2	(11.1)	16	(88.9)
Other	2	(28.6)	5	(71.4)
FAMILY STATUS:				
No Children	2	(50.0)	2	(50.0)
1 Child	4	(57.1)	3	(42.9)
2 Children	5	(17.2)	24	(82.8)
3 Children	12	(32.4)	25	(67.6)
4 Children	12	(27.9)	31	(72.1)
5 Children	12	(31.6)	26	(68.4)
6 Or More Children	22	(31.4)	48	(68.6)

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

FIGURE 6

PROPERTY OWNERSHIP AND LOCATION
Number (percent)

	Property Owned	No Property Owned	Location of Property Owned	
			Arizona	Other States
AVERAGE	101 (43.7)	130 (56.3)	86 (85)	15 (15)
RACIAL/ETHNIC GROUP				
Mexican-American	99 (48.1)	107 (51.9)	85 (85.9)	14 (14.1)
Other White	2 (11.1)	16 (88.9)	1 (50)	1 (50)
Other	0 (0)	7 (100)	0 (0)	0 (0)
FAMILY STATUS:				
No Children	2 (50)	2 (50)	1 (50)	1 (50)
1 Child	4 (57.1)	3 (42.9)	2 (50)	2 (50)
2 Children	9 (31.0)	20 (69.0)	9 (100)	0 (0)
3 Children	9 (23.7)	29 (76.3)	8 (88.9)	1 (11.1)
4 Children	15 (34.9)	28 (65.1)	14 (93.3)	1 (6.7)
5 Children	17 (43.6)	22 (56.4)	16 (94.1)	1 (5.9)
6 Or More Children	45 (61.6)	28 (38.4)	36 (80)	9 (20)

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

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it is likely that worker age and number of years worked cause a relatively high incidence of property ownership.

Figure 6 also indicates the location of property owned by the migrant farmworkers interviewed. The vast majority of those who own property, own property in the State of Arizona. The implications of this for the settling-out process are that, to the extent that families decide to settle-out, Arizona is the most likely location. One other interesting facet that was uncovered in this analysis is that 12 percent of those who own property, own property within the country of Mexico. Mexico, in fact, is the second largest region of property ownership.

Work Experience

Work Entry and Experience — As has been documented in numerous studies, the age at which migrant farmworkers enter the labor force is extremely low. For the Arizona migrant farmworker, the average age at entry into the labor force was approximately 14.5 years. Again, there was significant variation among the racial/ethnic groups, with Other Whites and Others entering the labor force 1.5 to 2 years later than Mexican-Americans. There is, again, the expected correlation between family size and the age at which the worker entered the labor force, with workers in larger families entering somewhat earlier than workers in small families.

The average Arizona migrant farmworker has spent slightly less than 10 years as an active migrant worker. Interestingly, Other Whites have been migrant workers for a longer period of time than either Mexican-Americans or Others. Reference to Figure 7 again shows a strong positive correlation between the number of years an individual has worked as a migrant farmworker and family size. While, as reported previously, workers in large families tend to be older, there is, nonetheless, a direct correlation between family size and length of time in the stream.

Travel Experience — In an attempt to collect data relevant for program planning, D. A. Lewis Associates asked migrant farmworkers interviewed to indicate the State (other than Arizona) in which they spent the most time while in the migrant stream. A compilation of the data collected on this variable may be seen in Figure 8. This Figure indicates that the State in which the majority of the workers indicated they spent the most time was California. While the proximity of California no doubt has a significant impact on its attraction for Arizona's migrant farmworkers, it is significant to note that the other four surrounding States do not exert a major draw on the farmworker population. In fact, the State which attracts the second largest group of farmworkers is Idaho, one relatively distant from Arizona.

Workers were also asked to indicate the major reason why they went to the State in which they spent the most time while

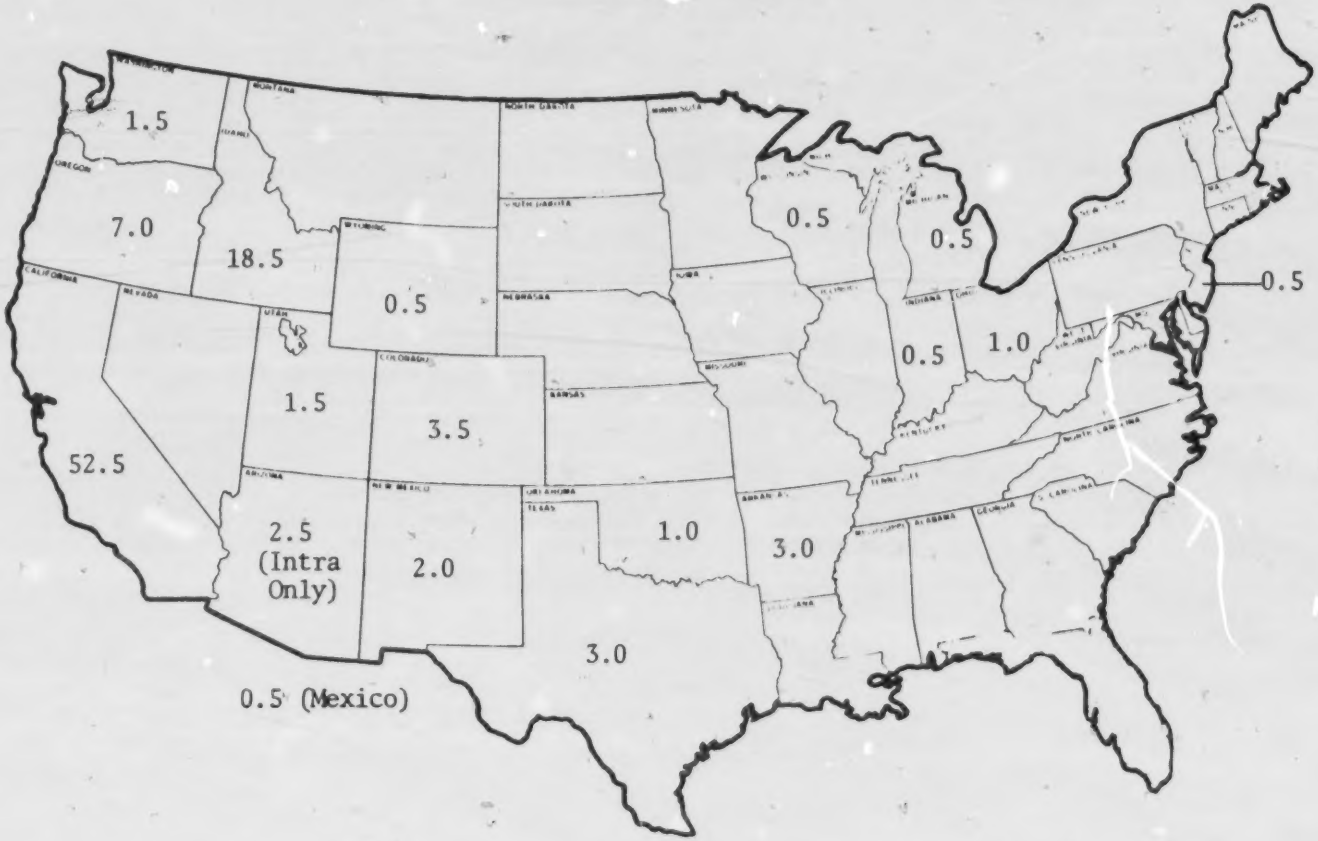
FIGURE 7

WORK ENTRY AND EXPERIENCE

	Age Started Working	Years As Migrant Worker
AVERAGE	14.53	9.71
RACIAL/ETHNIC GROUP		
Mexican-American	14.31	9.65
Other White	16.19	10.58
Other	15.67	8.83
FAMILY STATUS:		
No Children	15.50	5.75
1 Child	16.00	6.43
2 Children	14.48	9.17
3 Children	15.74	8.90
4 Children	14.16	9.58
5 Children	14.33	10.88
6 Or More Children	14.05	10.40

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

FIGURE 8



STATES (OTHER THAN ARIZONA) IN WHICH ARIZONA-BASED
MIGRANT WORKERS SPEND THE MOST TIME
(PERCENT OF WORKERS)

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

working in the stream during the year. The results of this are documented in Figure 9. As may be seen in Figure 9, the major reason indicated by farmworkers for traveling to the State was that it was the only work available at the time. The second most important reason indicated was that wages in that State were considered to be relatively good. These two major factors account for over 72% of all workers. It is significant to note that the reasons given by these workers are both economic variables and are not related to habit, relatives, or the availability of social services. As may be seen, the two primary factors for worker movement are economic variables, and the next three factors tend to be behavioral variables. These tend to substantiate the use of economic approach to predicting migrant farmworker movement and confirm the belief that migrant farmworkers are significantly more interested in the opportunity to become productive workers than they are to participate in welfare programs.

Crops Liked and Disliked — Workers were asked to identify the crop with which they most liked to work and the crop with which they most disliked to work. A summarization of the data on likes and dislikes is presented in Figures 10 and 11. The worker preferences identified in this study were not as divergent as those which D. A. Lewis Associates have determined in previous studies. In fact, as may be seen from the two figures, there is significant overlap between the crops in terms of

FIGURE 9

MAJOR REASON FOR WORKING IN STATE OF LONGEST RESIDENCE WHILE IN STREAM

Reason	Percent Of All Workers
Only work available at the time	58.8
Wages are good	13.4
Relatives or friends live here	12.9
Always have	4.6
Travel with crew	2.6
Chance for health, food, and welfare services	1.5
Good housing available	1.0
All other	5.2

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

FIGURE 10

CROP LIKED MOST

Crop	Percent Of All Workers
Lettuce	26.2
Cotton	13.8
Beets	12.3
Onions	10.3
All Other	37.4

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

FIGURE 11

CROP LIKED LEAST

Crop	Percent Of All Workers
Onions (Green)	26.8
Lettuce	12.1
Beets	5.4
Grapes	4.0
All Other	55.3

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

worker likes and dislikes. The net result of this is that it is impossible to make a determination of the impact of worker likes and dislikes on potential future behavior.

Settle-Out Plans

Worker Expectations About Remaining in Migrant Agriculture — The behavior of an individual is often determined as much by expectations as by the current situation. As an example, within the field of economics there is an entire school of thought which is founded on the concept that the level of an individual's current consumption is based on his expectations about future income. Thus, D. A. Lewis Associates felt it was important to ask migrant workers about their expectations concerning whether or not they will remain in migrant agriculture in the future. As may be seen in Figure 12, almost 90 percent of the migrant workers interviewed expected to remain in migrant agriculture. This figure should not be interpreted to mean that 90 percent of the present migrant workers want to continue in migrant agriculture, only that they expect to. The expectations expressed by migrant workers indicate, perhaps, a choice, but more likely significantly limited opportunities outside the field of migrant agriculture. It is interesting to note that there are significant differences on both racial/ethnic and family size characteristics in terms of expectations. As may be seen in Figure 12, Other

FIGURE 12

WORKER EXPECTATIONS ABOUT REMAINING IN MIGRANT AGRICULTURE
(Percent of workers surveyed)

	Plan To Remain In Migrant Agriculture	Do Not Plan To Remain In Migrant Agriculture
ALL WORKERS	88.6	11.4
RACIAL/ETHNIC GROUP		
Mexican-American	92.2	7.8
Other White	52.9	47.1
Other	71.4	28.6
FAMILY SIZE:		
Small Families (3 or less children)	84.2	15.8
Large Families (4 or more children	90.1	9.9

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

White are approximately evenly divided about future expectations, whereas for Mexican-Americans, over 90 percent expect to remain in agriculture. In terms of family size, there is again a significant difference in expectations, with larger families more likely to anticipate remaining in migrant agriculture than smaller families.

Factors Influencing the Settle-Out Process — As has been documented throughout this report, it is the basic philosophy of migrant farmworkers that they should be productive members of American society and not be participants in the welfare system. This intellectual bias is borne out by the data reported in Figure 13. As may be seen, the factors that are most important in the settle-out process are both economic and deal with job opportunities in and outside the area of farming. Arizona migrant workers are about evenly divided as to whether they would prefer to have a job in or outside of farming, with those preferring to continue to work in farming being a slightly higher percentage. Approximately two-thirds of the Arizona migrant farmworkers indicated that job opportunities were the factors that were most important in their settle-out decision. One additional item of interest that may be observed from a review of Figure 13 is that there is very little difference in terms of the factors which would cause a migrant farmworker to settle-out based on his family size. In fact, the only differences of any significance that may be seen in the

FIGURE 13

MAJOR FACTORS CAUSING ARIZONA-BASED MIGRANT WORKERS TO DECIDE TO SETTLE-OUT

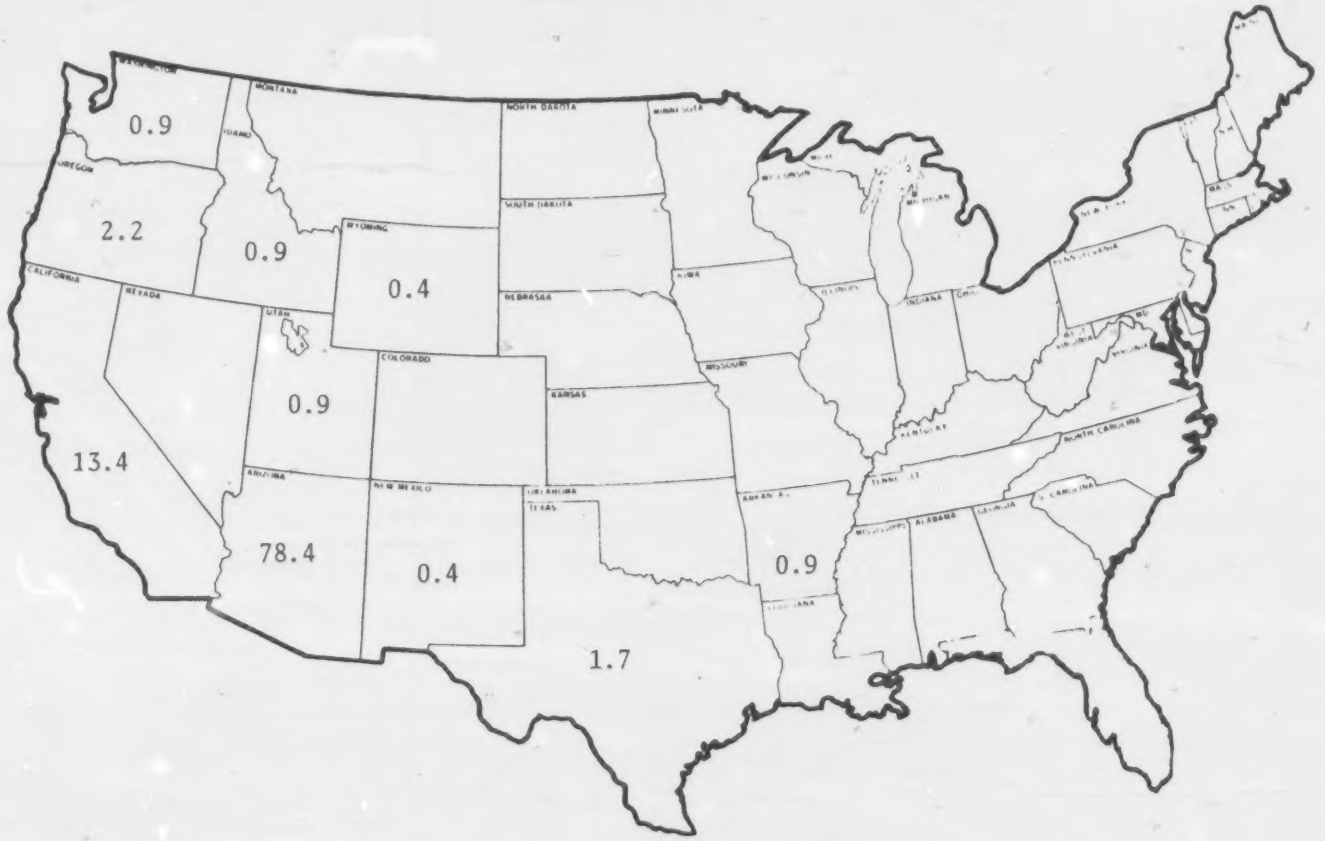
	Percent Of All Workers	Percent Of Small Families (3 or Fewer Children)	Percent Of Large Families (4 or More Children)
Opportunity for good job in farming	32.7	33.3	32.4
Opportunity for good job outside farming	29.3	31.9	27.9
No work in usual states	13.9	13.9	13.9
Chance for job training	9.6	13.9	7.4
Usual crew broke up	5.3	1.4	7.4
Chance for health, food or welfare services	3.4	2.8	3.7
Bad season (poor harvest)	2.4	0.0	3.7
Bad wages in the stream	1.0	0.0	1.5
Acceptance by local community	0.0	0.0	0.0
All Other	2.4	2.8	2.2

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

table are that the opportunities for job training are approximately twice as important to members of small families than large families, whereas the break-up of the usual crew is more likely to cause a large family to settle out.

Settle-Out State — A final question concerning migrant worker settle-out plans was asked as a part of this study. The data collected as a result of that are displayed in Figure 14 which indicates the percent of Arizona-based migrant farmworkers who plan to settle-out in the States indicated. As may be readily seen from this figure, the vast majority of farmworkers plan to settle-out within the State of Arizona. The impact of these settle-out plans is significant for the Arizona Migrant Education Program in that, barring the passage of the Quie amendment which would limit the participation of settled-out migrant students to two years, not five years, once migrant workers begin to settle-out in Arizona and not continue to move within the stream, the Arizona Migrant Education Program will be responsible for the provision of services to a large and increasingly vocal group for the complete year. The implications of this are significant and will be dealt with in Chapter X below.

FIGURE 14



PERCENT OF ARIZONA-BASED MIGRANT WORKERS WHO PLAN TO SETTLE-OUT IN INDICATED STATES

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

CHAPTER 3

DATA VALIDATION AND COMPARISONS

Data Validation

The concept of validity when applied to data is subject to a great divergence of opinion as to its definition. The basic definition for a valid data item or instrument is that it is in agreement with some external measure of objective reality that has been *a priori* accepted as valid. What this indicates is that absolute validity can never be assessed directly since objective reality cannot be directly determined. Validity of data, then, must be evaluated relative to an accepted measure of, or proxy for, objective reality.

In order to insure that data are valid and reliable, adequate quality control procedures must be developed and implemented as part of any survey system. In the case of the migrant farmworker questionnaire that was developed for the Arizona Needs Assessment, data quality was insured through the selection and field supervision of the field interviewers and through pretest and face validity checks of the instrument itself. The interviewers selected to administer the migrant worker questionnaire were individuals who were intimately familiar with the social structure and working conditions of migrant workers, both in and outside the State of Arizona. These individuals were able to establish a good rapport with those interviewed and were

able, therefore, to collect relatively accurate, unbiased data. The implementation of the questionnaire was directed by a field supervisor in each area who was not only available to assist the interviewers, but who provided ongoing oversight of the workers. In addition to the special efforts which were put forth once the instrument was in the field, D. A. Lewis Associates also conducted a pretest of the instrument with both former migrants and with professionals to make certain that the questions that were utilized were clearly worded and readily understandable. Finally, a complete set of detailed instructions for the completion of the questionnaire was developed and provided to migrant workers and coordinators.

Data Comparisons

One of the most important aspects of the Arizona Migrant Education Needs Assessment project is that the methodology utilized is highly similar to that utilized in the Florida Needs Assessment Study. The import of this is that direct data comparisons may be made between the two States providing a much more complete picture of the migrant farmworker situation in the United States than would be possible with only one of the studies. These data comparisons are detailed in the paragraphs below.

Figure 15 presents a comparison of the characteristics of the migrant farmworker population in Arizona and Florida. As may be readily seen, in both States the Mexican-American

FIGURE 15

CHARACTERISTICS OF THE MIGRANT FARMWORKER POPULATION INTERVIEWED
(In Percent)

	Arizona	Florida
RACIAL/ETHNIC GROUP:		
Black	0.4	9.4
Mexican-American	88.8	76.7
Other White	8.2	11.5
Other	2.6	2.4
FAMILY STATUS:		
No Children	1.7	19.2
1 Child	3.0	21.3
2 Children	12.4	13.9
3 Children	16.3	15.3
4 Children	18.5	7.3
5 Children	16.7	7.0
6 Or More Children	31.3	16.0
CREW MEMBERSHIP:		
Crew Member	29.6	44.3
Not Crew Member	68.2	54.0
Not Reported	2.1	1.7

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students
D. A. Lewis Associates, Inc., Needs Assessment for Florida's Migrant Students)

population is predominant in terms of the composition of the work force. The predominance is heightened within Arizona, however. The other statistic of significance is that Blacks comprise a very small percentage of the Arizona migrant population, whereas they are approximately 10 percent of the population in Florida. Figure 15 also reports data on family size. As may be seen, the family size in Arizona is significantly larger than that in Florida, a fact that is further confirmed in Figure 16. Finally, Figure 15 presents information on crew membership for both States and indicates that the crew system is much more active with Florida-based migrant farmworkers than is the case with Arizona-based migrant farmworkers.

As was discussed previously, the number of children per family is significantly different between Arizona and Florida. In fact, family size is approximately two children larger in Arizona than is the case in Florida. As may also be seen in Figure 16, the relative number of children per family is similar when one is making intergroup comparisons.

The average age for migrant farmworkers in the Arizona study was determined to be 41.10 years. This is substantially different from the figure determined for Florida which is 33.9 years. The Florida data, while accurate for the population surveyed, may have been biased downward to some extent. In fact, a study completed for the Department of Health, Education,

FIGURE 16

NUMBER OF CHILDREN PER WORKER FAMILY

	Arizona	Florida
AVERAGE	4.65	2.74
RACIAL/ETHNIC GROUP:		
Mexican-American	4.72	3.13
Other White	3.89	1.52
Other	4.57	1.91

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students
D. A. Lewis Associates, Inc., Needs Assessment for Florida's Migrant Students)

FIGURE 17

EDUCATIONAL ATTAINMENT

	Arizona-Based Workers	Florida-Based Workers
Last Grade Completed	4.83	5.35
Age At Leaving School	13.04	12.33

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students
D. A. Lewis Associates, Inc., Needs Assessment for Florida's Migrant Students)

and Welfare indicated that the average age for Florida migrant farmworkers in 1968-69 was 40.8 years. It is a well known fact that the average age for Florida's migrant farmworkers has decreased significantly since the 1968-1969 season, so it is believed that there is a significant difference between the average age of Arizona's and Florida's population.

As may be seen in Figure 17, the differences in educational attainment between Arizona-based and Florida-based migrant farmworkers are not significant. On average, Florida-based migrant farmworkers had completed one-half grade more than Arizona-based migrant farmworkers. By contrast, Arizona farmworkers had remained in school somewhat longer.

Some significant differences were uncovered in the rate of property ownership of Arizona- and Florida-based migrant farmworkers as may be seen in Figure 18. The Arizona worker is about twice as likely to own property (land, farms, or homes) as the Florida-based worker. While the magnitude of the difference may be in part due to the sampling techniques utilized in both the Florida and Arizona studies, it is believed that the direction of the difference is valid. (Sampling in the Arizona and Florida studies was conducted at the place of residence of migrant farmworkers. In Florida, a greater percentage of workers was interviewed in work camps, whereas interviews tended to be conducted in residential areas and trailer parks in Arizona.) The Arizona farmworker is somewhat older than the Florida farmworker and so has had a longer period of time in which to earn income and save towards the purchase of property.

FIGURE 18

PROPERTY OWNERSHIP

	Arizona-Based Workers	Florida-Based Workers
Property Owned	43.7	22.8
No Property Owned	56.3	77.2

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students
D. A. Lewis Associates, Inc., Needs Assessment for Florida's Migrant Students)

FIGURE 19

WORK EXPERIENCE

	Arizona-Based Workers	Florida-Based Workers
Age Started Working	14.53	14.21
Number of Years as a Migrant Farmworker	9.71	9.18

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students
D. A. Lewis Associates, Inc., Needs Assessment for Florida's Migrant Students)

Figure 19 presents a summary of the work experiences of Arizona- and Florida-based farmworkers. As may be seen from this Figure, the differences in the two populations are not great. The average age at which both groups started working is slightly over fourteen years and both have spent approximately nine and one-half years in the field as a migrant farmworker.

Farmworkers settle-out of migrant agriculture for two different reasons: (1) they leave the field because of opportunities presented elsewhere and, (2) they plan to leave the field at some time in the future and are working in migrant agriculture only for a specific period. Plans towards settling-out, therefore, can be quite critical and can have a significant impact on worker behavior, especially in terms of their reaction to social programs. As may be seen in Figure 20, the Arizona farmworker is somewhat more likely to remain in migrant agriculture than is the Florida-based worker. In both cases, however, the vast majority of the farmworkers expect that they will remain in the migrant field. As was discussed previously, this should not be interpreted to mean that all of these individuals <u>want</u> to remain in migrant agriculture, only that they expect to.

The two most important factors which would cause the worker to decide to settle-out of migrant agriculture are shown in Figure 21. In both the Florida and Arizona studies, it was determined that job opportunities are the most critical factors in the decisionmaking process. One major difference

FIGURE 20

SETTLE-OUT PLANS

	Arizona-Based Workers	Florida-Based Workers
Plan to Remain in Migrant Agriculture	88.6	80.2
Do Not Plan to Remain in Migrant Agriculture	11.4	19.8

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students
D. A. Lewis Associates, Inc., Needs Assessment for Florida's Migrant Students)

FIGURE 21

FACTORS CAUSING WORKERS TO DECIDE TO SETTLE-OUT

	Arizona-Based Workers	Florida Based Workers
Opportunity for Good Job in Farming	32.7	25.2
Opportunity for Good Job Outside Farming	29.3	62.0
All Other Factors	38.0	12.8

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students
D. A. Lewis Associates, Inc., Needs Assessment for Florida's Migrant Students)

was determined, however. In the case of the Arizona-based farmworker, the most important factor is an opportunity for a good job in the field of farming, with an opportunity outside of farming being of secondary importance. This is the reverse of the case for the Florida-based worker where more than twice as many workers were searching for jobs outside the field of farming. The impact of this is that Arizona-based workers are more likely to continue in migrant agriculture than are Florida workers because of their preference for agriculture as a way of life.

It is interesting to review Figure 22 to determine where migrant workers from each State plan to settle-out. It is apparent from reviewing the data that Arizona-based workers are significantly more satisfied with Arizona as a State in which to settle-out than Florida workers are concerning Florida. Over three-quarters of the Arizona-based workers plan to settle-out in Arizona, whereas less than 50% of the Florida-based farmworkers plan to settle-out within the State of Florida. This will have a significant impact on Arizona's social service programs in that when the farmworkers do leave the field they are quite likely to remain within the State of Arizona and will, therefore, increase the pressure on the programs which serve the lower income groups in the State.

FIGURE 22

SETTLE-OUT STATE

	Arizona-Based Workers	Florida-Based Workers
Home-Base State	78.4	46.6
Other States	21.6	53.4

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students
D. A. Lewis Associates, Inc., Needs Assessment for Florida's Migrant Students)

CHAPTER 4

MIGRANT FARMWORKER DEMOGRAPHIC CHANGES

Changes Since 1960

This section of the Task I Final Report presents a brief overview of the changes that have occurred in the Arizona migrant farmworker population since 1960 and the changes that may be expected between 1977 and 1980. Throughout the report, ongoing references have been made to the dynamics of the Arizona migrant population. Thus, this section will only briefly highlight the changes in the population which are believed to have a major impact on the Arizona migrant education system. Among the more important factors that have been observed as a result of this study are:

1. There has been a basic stability in some aspects of the Arizona migrant farmworker population, a stability that is absent from, in particular, the east coast stream. The predominant racial/ethnic group for migrant farmworkers in Arizona has been, and continues to be, Mexican-American. Similarly, family size has been quite large since 1960 and is likely to remain thus.
2. The importance of the crew system on the Arizona migrant farmworker has decreased significantly in the past 16 years. At present only 30% of the population

indicated that they travelled with a crew while moving through the stream. Even this figure is likely to be somewhat inflated due to the potential for misinterpretation of the term crew. The impact of this change is that it has become increasingly difficult for education and social service programs to locate and contact workers or their families as they move through the stream.

3. There has been an increasing impact of illegal aliens on the Arizona migrant farmworker population. Historically, one of the major motivations underlying migration to the United States has been the desire for economic betterment. Consequently, an increase in immigration will inevitably result in an increase in the labor force and, hence, an increase in the number of people competing for jobs. It would be expected, therefore, that the short run impact of an increase in immigration will be a rise in the rate of unemployment. This impact will vary, however, depending upon the particular attributes of the immigrants and the labor markets which they enter. In the case of the Arizona migrant farmworker, it is believed that there has been a significant increase in competition for local jobs, displacing a significant number of individuals and causing them to join the migrant stream. Aside from the direct cost to society of

increased unemployment resulting from this illegal immigration, society will tend to incur additional costs by increased demands on the public sector. As the unemployment rate increases, the number of individuals receiving welfare, unemployment compensation, and government subsidies will also increase. The only reason why this has not occurred to a great extent among the Arizona population is that there is an extremely strong work ethic among the predominantly Mexican-American population which has tended to make it very reluctant to accept welfare. To the extent that this underemployed population becomes more willing to accept services from welfare agencies (as are other segments of the population), the impact on the public service sector could be enormous.

4. While there is still a large gap between the Arizona migrant farmworker population and the general population in terms of educational level, it has been observed that the average level of education for migrant workers has risen to some extent.
5. There has been an increasing awareness of, and participation in, social programs by the Arizona migrant farmworker population over the past 16 years. This phenomenon has been observed within the migrant education program itself where the number of pupils served increased by 7.4 percent within the last year alone.

6. A significant shift has been observed in school enrollment patterns. Students are remaining in school considerably longer than was previously the case and, thus, there is an increasing rate of enrollment of migrant students in secondary education. It was concluded as a result of our interviews with migrant farmworkers that education is being observed as of increasing value to students in helping them to have alternatives concerning career choices in the future.

Changes Expected Between 1977 and 1980

The previous section has documented the changes which have occurred in the Arizona migrant farmworker population since 1960. This section, therefore, will review those changes which can be expected between 1977 and 1980. It should be noted that the magnitude of the changes that can be expected over the forthcoming four-year period will be significantly less dramatic than those which have been observed over the past sixteen years. In a four-year period only marginal changes will occur; thus, the 1980 migrant farmworker population in Arizona will appear much the same as it does today. The major trends that are likely to be observed between 1977 and 1980 are:

1. The increase in family size will level out over the next four years. What is to be expected is that in the very long run there will be a decrease in average family size among Arizona's migrant farmworkers. This

decrease will ultimately have an impact on school enrollment patterns and the need for special services.

2. The impact of the crew system will continue to decrease. In the past the crew leader served a very needed function for migrant farmworkers, that of communication and work management. Today, however, migrant workers are significantly more sophisticated in terms of their knowledge of available work and their ability to manage their own employment. The impact over the next four years, therefore, is likely to be a decline in travel as a part of crews and an increase in travel of individual families and very small groups of families.
3. The pressure which illegal aliens have brought to bear on the Arizona migrant farmworker population cannot be underestimated. Studies conducted by the U. S. Immigration and Naturalization Service have indicated that approximately 560,000 illegal aliens entered, were apprehended, and were deported over the Mexico-United States border in 1976. It has been estimated that for each illegal alien that is apprehended, two are able to enter the country and remain unapprehended. To the extent that this has been true in the past, there have been significant pressures placed on the population. There is reason to believe

that this pressure will subside in the coming four years. The United States government is undertaking a series of major studies addressing the illegal alien situation and cooperative efforts are being undertaken on the part of the United States and Mexican governments. The likely impact is that there will be a tightening of the borders such that it will be more difficult for illegal aliens to enter the United States.

4. The school enrollment shifts that have been identified in previous sections are likely to continue. There will be an increase in pressure for preschool and secondary school enrollments within the State of Arizona. Pressure for preschool enrollments is likely to occur as Federal legislation begins to enter the field and to provide funds for special services for the under-five-years-of-age population. Secondary enrollments are again expected to increase in much the same manner that was documented over the past year, where secondary school enrollment in the Migrant Education Program increased by approximately 39%.

CHAPTER 5

MIGRANT STUDENT ENROLLMENT PATTERNS

On August 1, 1976, Arizona's migrant students were located in fourteen States and the Nation of Mexico. A summary of these data may be seen in Figure 23. This figure presents information on the number of migrant students who were eligible to be enrolled in schools and the number of those students who were actually enrolled in school programs on August 1. Nationally, less than 29% of Arizona-based migrant students were enrolled in school as of August 1. In terms of percent of students who were enrolled in school as of that date, Arizona stands in the forefront for major affected States. These data are further described in Figure 24 which shows for each State in which Arizona's migrant students were present the percent of those students who were actually enrolled.

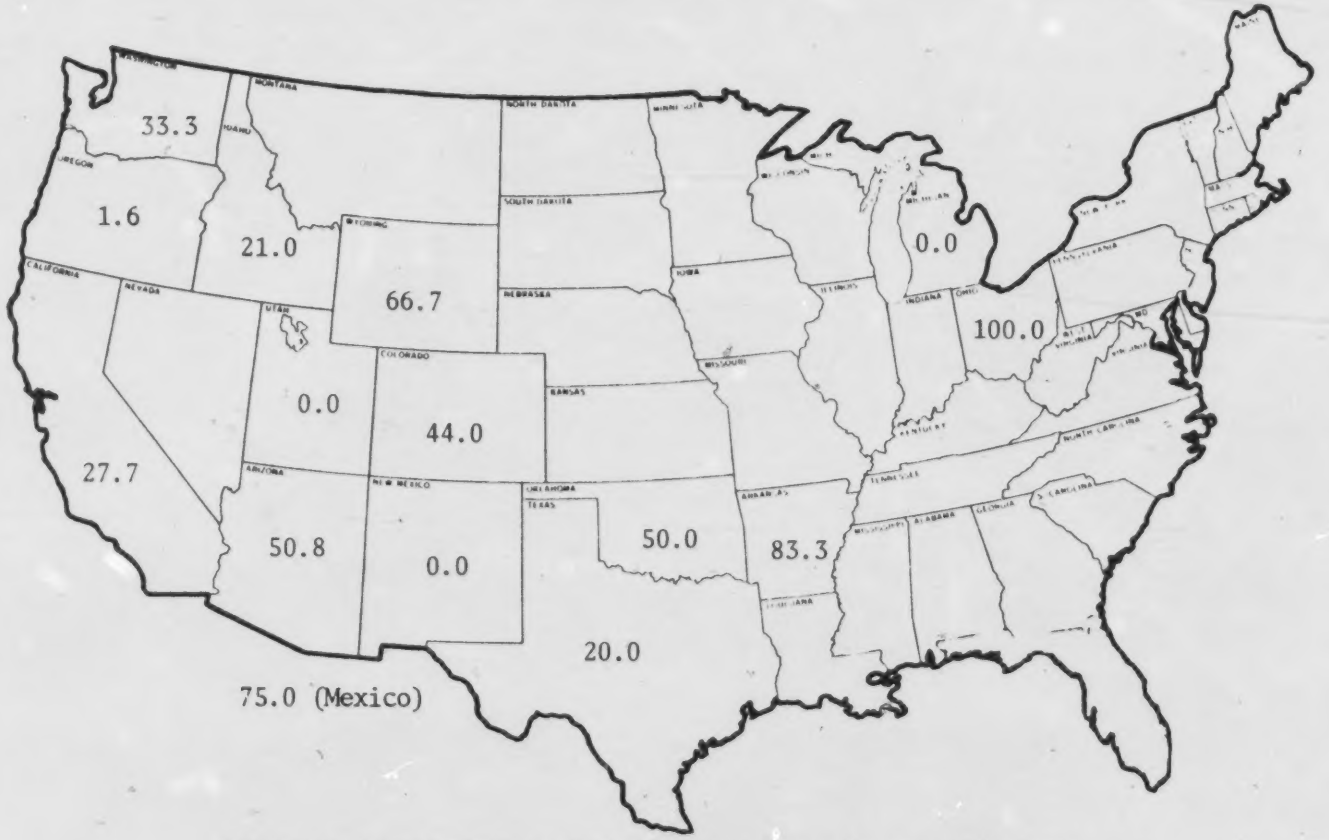
FIGURE 23

ARIZONA-BASED MIGRANT STUDENT SCHOOL ENROLLMENT
BY STATE OF RESIDENCE ON AUGUST 1, 1976

State	Number of Families	Number of Children Eligible for Enrollment	Number (Percent) of Children Enrolled in School
TOTAL	217	787	227 (28.8)
California	97	336	93 (27.7)
Idaho	36	143	30 (21.0)
Arizona	41	132	67 (50.8)
Oregon	14	64	1 (1.6)
Texas	7	30	6 (20.0)
Colorado	6	25	11 (44.0)
All Other States	16	57	19 (33.3)

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

FIGURE 24



PERCENT OF ELIGIBLE ARIZONA-BASED MIGRANT STUDENTS
RESIDING IN INDICATED STATES WHO WERE
ENROLLED IN SCHOOL ON AUGUST 1, 1976
(OVERALL AVERAGE - 28.84 PERCENT)

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

CHAPTER 6

MIGRANT FAMILY NEEDS

As a part of the survey of Arizona's migrant farmworker population, respondents were asked to identify the three greatest social needs which the family felt while living in Arizona. The results of this compilation may be seen in Figure 25. As may be observed, the most frequently mentioned problem was lack of money. This is to be expected and surely impacts on all of the other areas which are mentioned by migrant farmworkers. The second most important area which Arizona's migrant farmworkers felt was that of health care followed by education for their children. That these two needs are mentioned so frequently by migrant farmworkers indicates their awareness of the necessity for health and especially for education for their children if the poverty cycle is to be broken.

In addition to identifying the three greatest social needs which the family felt, migrant workers, when interviewed, were asked to rank these three needs in order of priority. The needs identified, therefore, were weighted in an attempt to indicate the strength of need as identified by individual migrant farmworkers. As may be seen in Figure 26, the most strongly felt need remains money. Interestingly, the second most strongly felt need is that for day care services. Referring to Figure 25, it can be seen that only seven migrant farmworkers indicated that there was a need which they felt for day care

FIGURE 25

MIGRANT FARMWORKER FAMILY NEEDS

Need	Number of Farmworkers Indicating Need
Money	133
Health Care	90
Education for Children	72
Food	72
Housing	51
Clothing	42
Training for Jobs	29
Education for Self	17
Transportation	16
Day Care	7
Legal Aid	3
Other	35

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

FIGURE 26

STRENGTH OF MIGRANT FARMWORKER FAMILY NEEDS

Need	Strength of Need
Money	2.53
Day Care	2.14
Education for Children	2.07
Education for Self	2.06
Health Care	2.04
Housing	1.88
Food	1.76
Training for Jobs	1.72
Clothing	1.71
Legal Aid	1.67
Transportation	1.50
Other	1.97

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

services. That the strength of need ranks second indicates that where a need for day care services is perceived, it has a strong impact on the family, one which plays itself out in both social and economic spheres. Two other areas which are somewhat surprising are that of the need for education for the individual himself, which ranks fourth in terms of strength of need, and the fact that health care which was the second most frequently identified need, ranks only fifth when the strength of these needs is evaluated.

CHAPTER 7

MIGRANT FARMWORKER MOBILITY

Because of an increasing awareness of the problems that migrant and seasonal farmworkers face, education, labor, health, and welfare administrations have begun to reach out to these workers, but progress is slow. One of the major reasons why progress is slow is due to the great difficulty in identifying, locating, and tracking workers as they move throughout the United States. Until it is possible to quickly identify migrant farmworkers and to anticipate and project their travel patterns, it will remain extremely difficult to provide the comprehensive package of social services that workers need.

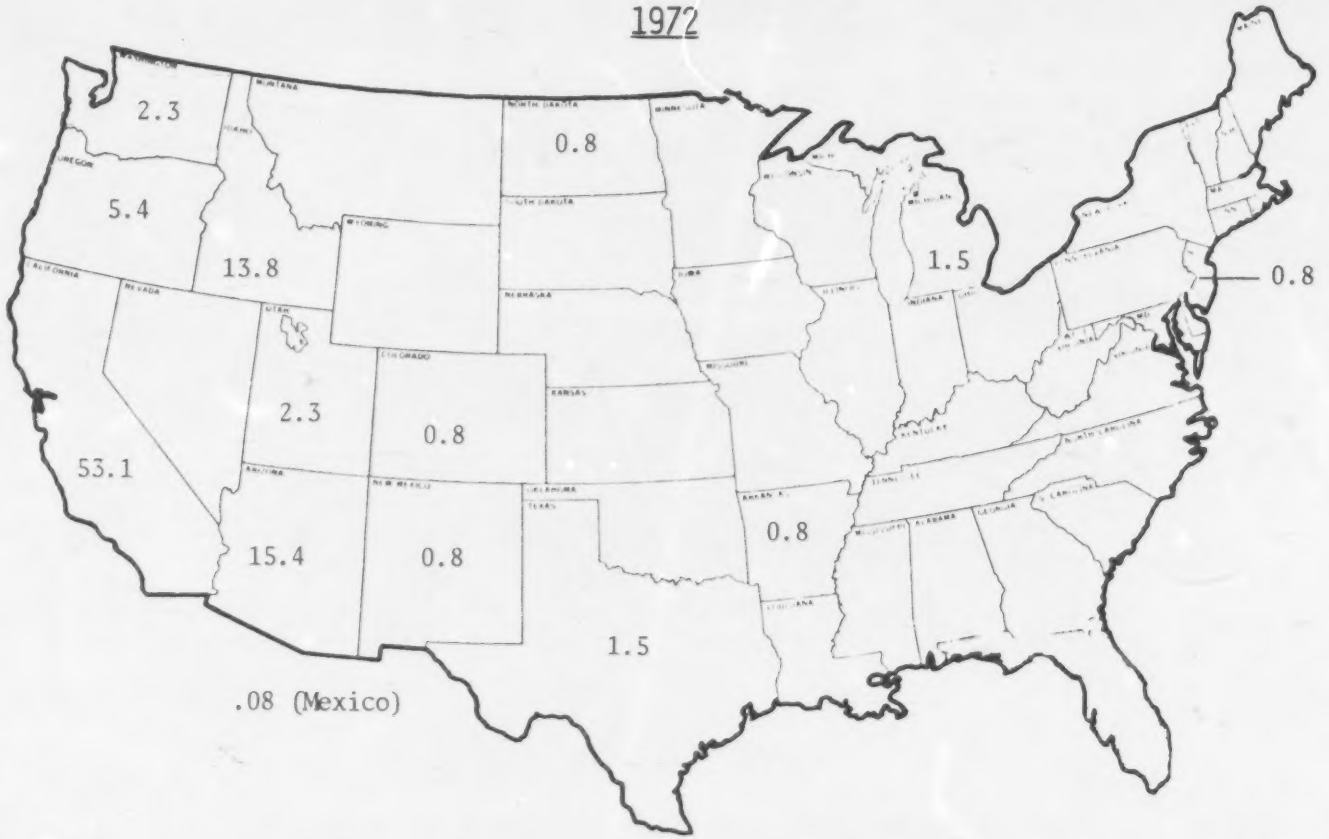
Some previous efforts at tracking and predicting migrant farmworker flows have met with mixed success. Studies completed in the late 1950s and early 1960s by the U. S. Department of Labor form the basis for current thinking about movement patterns, studies which are now hopelessly outdated. The best source of current data is the Migrant Student Record Transfer System (MSRTS). This system was designed to transfer the academic and health records of migrant students from school district to school district as students and their families move about the United States. An adaption to this system developed by D. A. Lewis Associates, Inc., allows an evaluation of migrant student movements to be performed. MSRTS' strength (that it very effectively transfers records of migrant students who are enrolled

in school programs) is its weakness for projection purposes. Since the system only contains records on school enrollments, not all workers (or their families) are included initially. Since not all States make a maximum effort to identify and recruit migrant students, the MSRTS cannot be used for projection purposes at this time.

This chapter, therefore, will take a first step in identifying the patterns of Arizona-based migrant farmworker movement and, hence, understanding and predicting travel patterns that workers follow.

Arizona-based migrant worker mobility patterns are documented in Figures 27 through 31 for the years 1972 through 1976. These Figures indicate the States in which Arizona migrant farmworkers were located as of August 1 of the respective year. These data were then summarized and projected to 1980 utilizing the adjusted regression projection technique. The adjusted regression projection technique was selected because of the relative stability that was observed in Arizona migrant farmworker mobility patterns. (Almost 60% had been located in the same State on August 1 for three or more years prior to the survey and 38% had been in the same State for five or more years.) The results of this projection may be seen in Figure 32. An analysis of the data presented in Figure 32 indicates that there is likely to be a continued increase in the number of Arizona-based migrant farmworker children who do not leave the State but will remain in Arizona and will be eligible for enrollment in the migrant

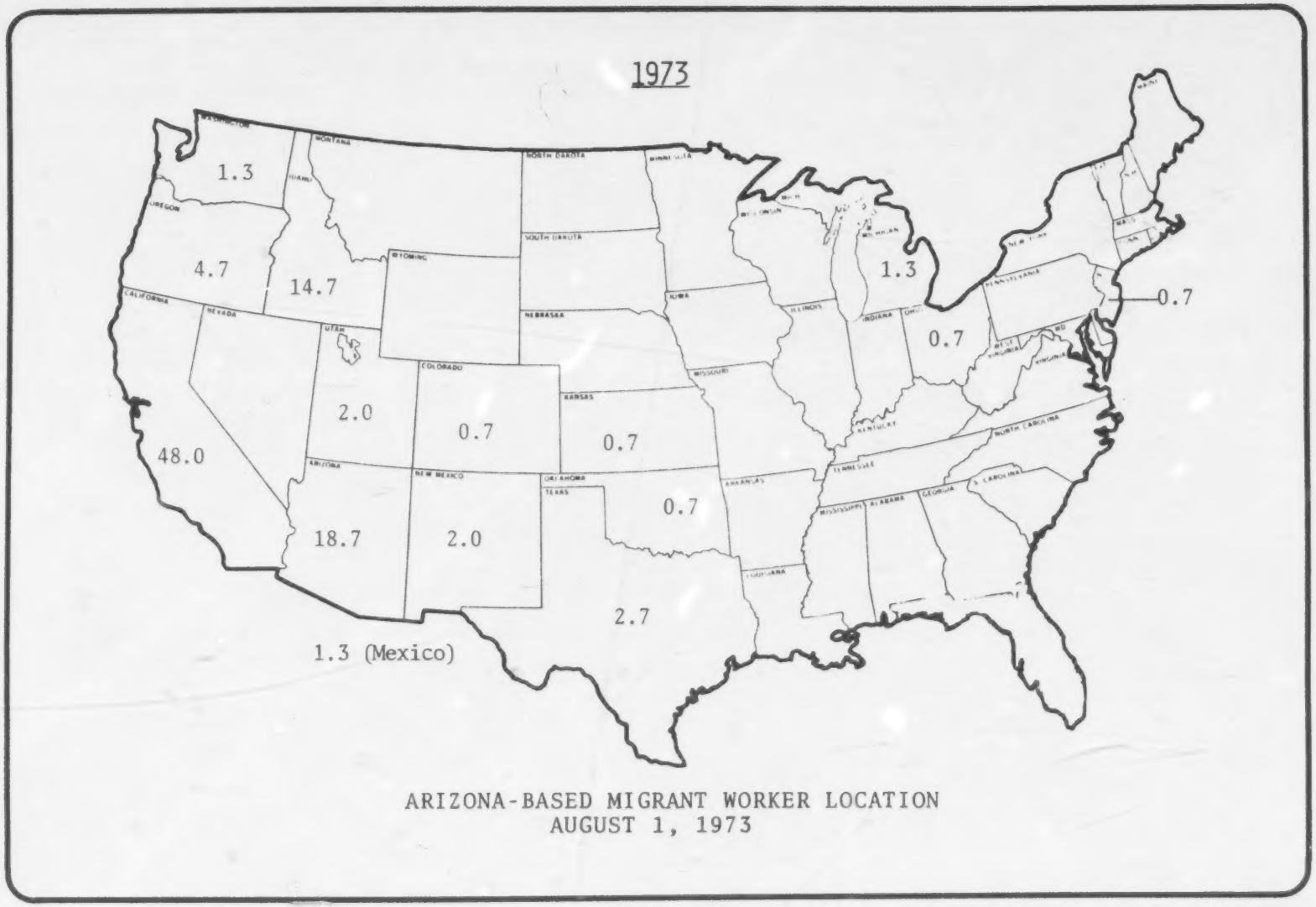
FIGURE 27



ARIZONA-BASED MIGRANT WORKER LOCATION
AUGUST 1, 1972

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

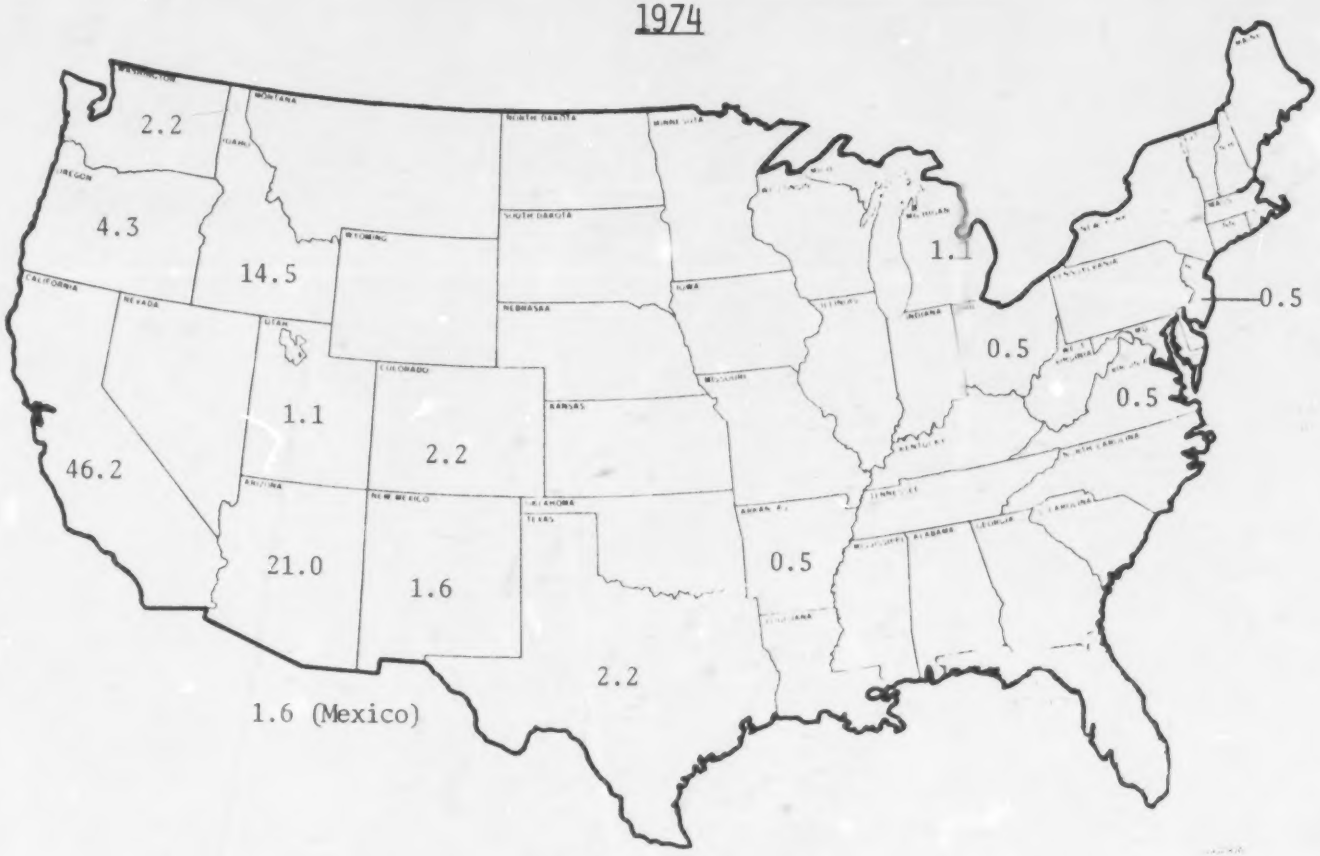
FIGURE 28



ARIZONA-BASED MIGRANT WORKER LOCATION
AUGUST 1, 1973

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

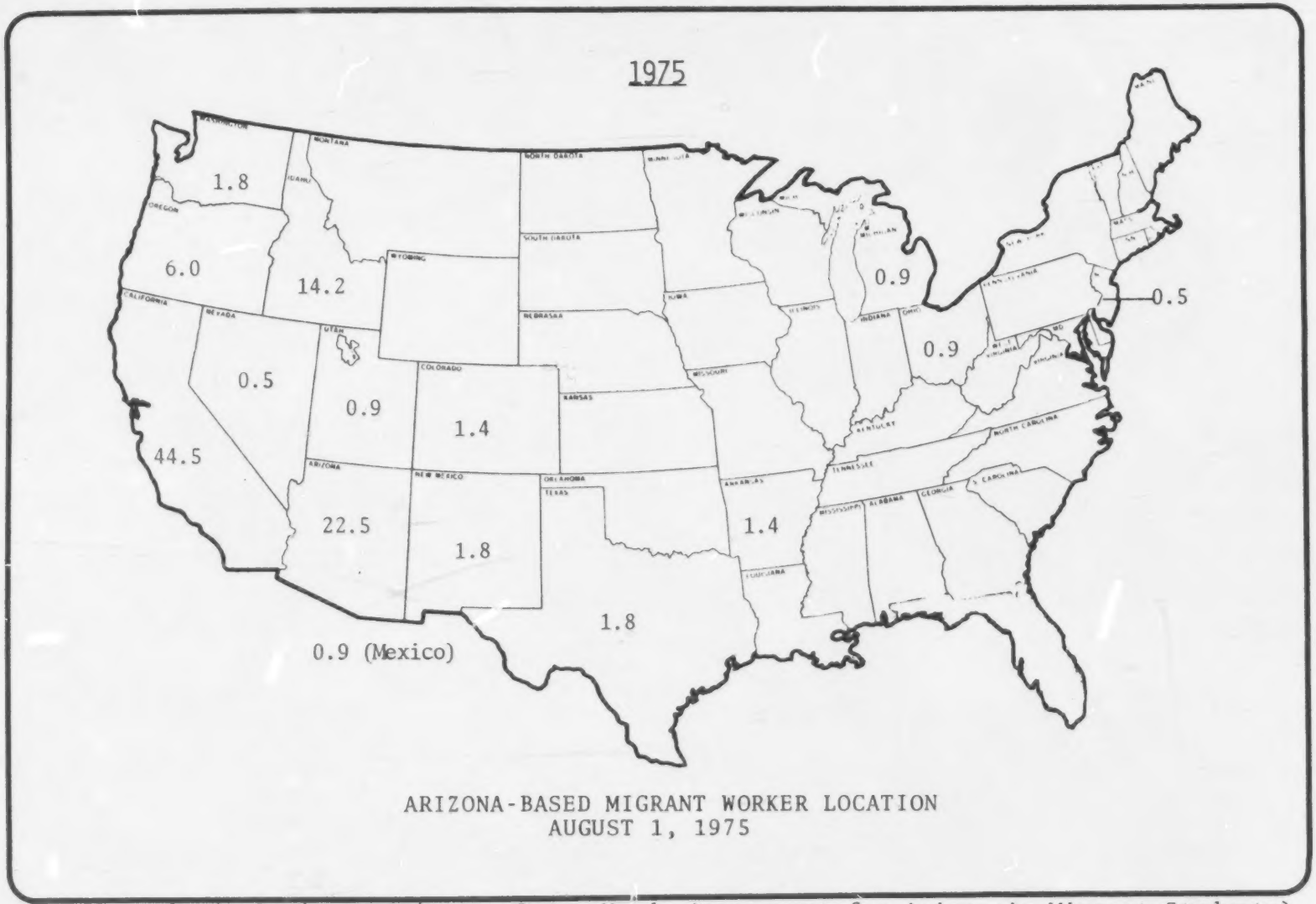
FIGURE 29



ARIZONA-BASED MIGRANT WORKER LOCATION
AUGUST 1, 1974

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

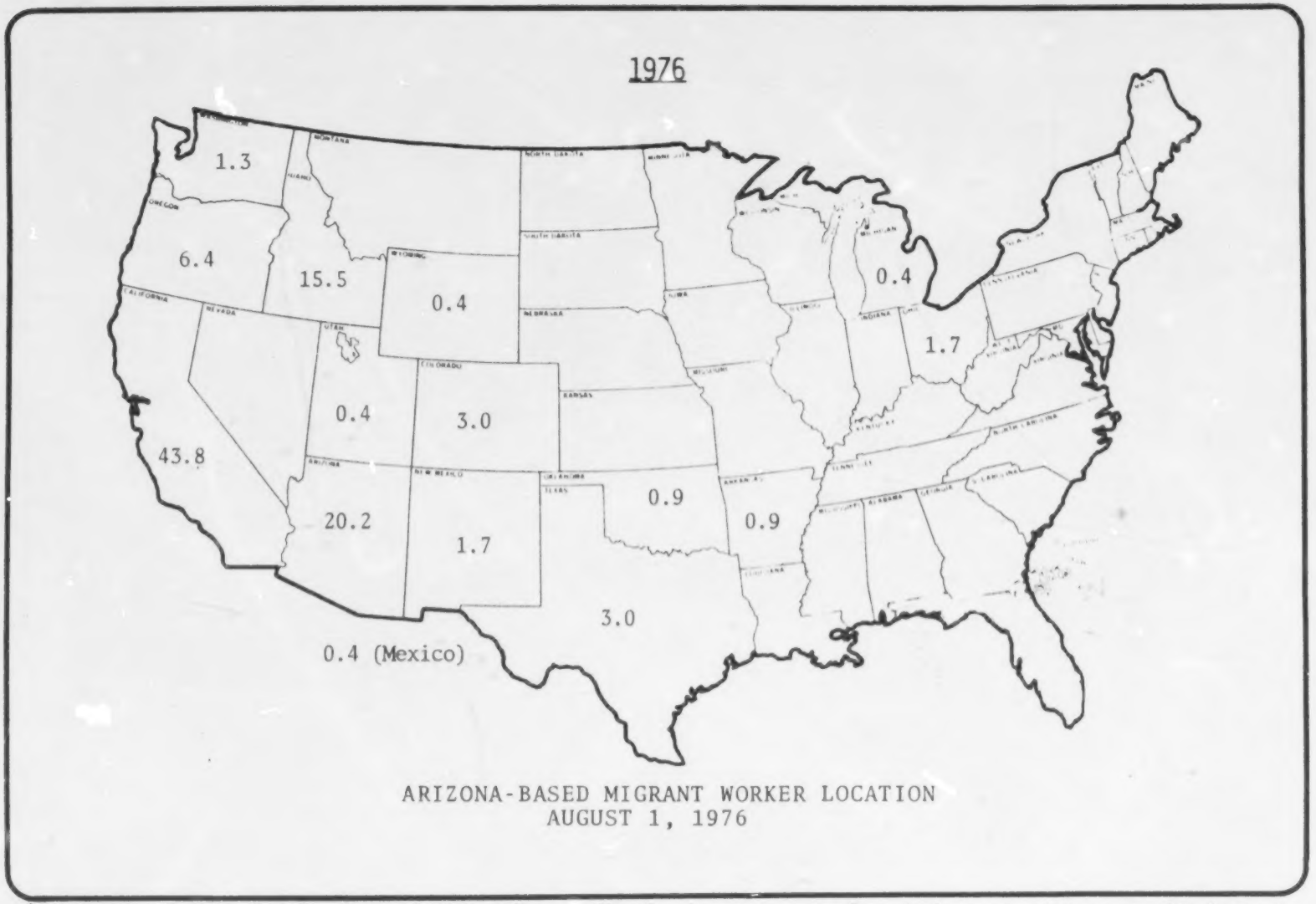
FIGURE 30



ARIZONA-BASED MIGRANT WORKER LOCATION
AUGUST 1, 1975

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

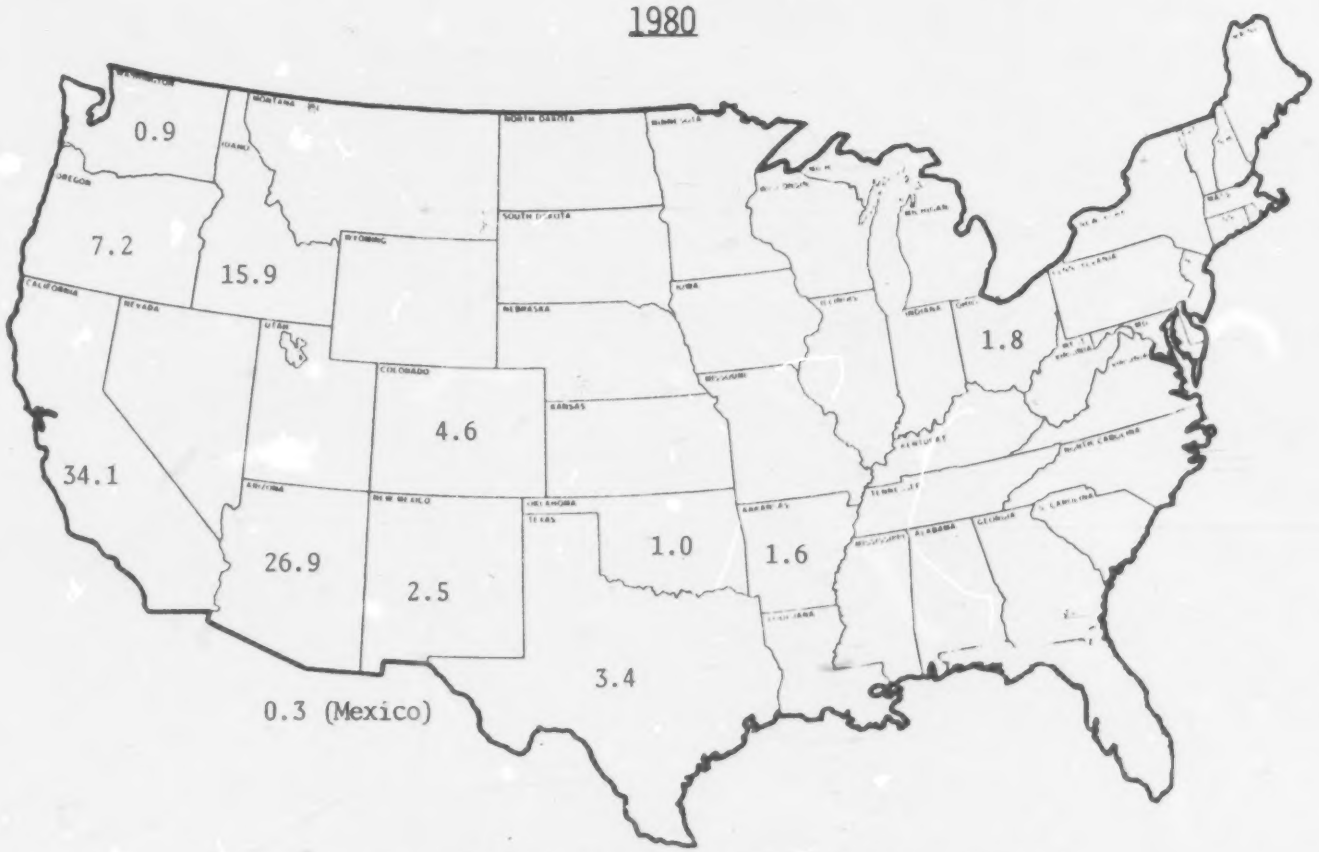
FIGURE 31



ARIZONA-BASED MIGRANT WORKER LOCATION
AUGUST 1, 1976

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

FIGURE 32



PROJECTED ARIZONA-BASED MIGRANT WORKER LOCATION
AUGUST 1, 1980

(Source: D. A. Lewis Associates, Inc., Needs Assessment for Arizona's Migrant Students)

education program. Two other States which are projected to have a continuing increase in migrant enrollment of Arizona's students are Idaho and Colorado. The State which will decrease as a major attraction for Arizona's migrant farmworkers is California. Whereas in 1972 over 50% of all Arizona-based migrant farmworkers were located in California on August 1, by 1980 only approximately one third of the workers will be in California on that date. The other two States which will experience a relatively large decrease in the number of Arizona students who migrate to the State and who are resident on August 1, are Washington and Utah.

For the general population, a multitude of social services is available generally within a short distance of the individual's residence. Education, health, welfare, and most other social services are provided by States and municipalities and their locations are well known by residents. Unfortunately, this is not the case for migrant farmworkers. Due to their mobility, migrant farmworkers rarely learn of, or live close enough to, social service systems to participate at the same rate as the general population. An understanding of the travel patterns of migrant farmworkers is, therefore, essential if interstate cooperative efforts are to occur and if the respective State programs are to act such that the need of migrant students and families are best met.

CHAPTER 8

TECHNOLOGICAL IMPACTS

In past generations, farming was a way of life to both farmer and farmworker. This is becoming increasingly less so, especially within the past sixteen years, for the farm owner. In fact, there has been a significant decrease in the number of farms and a significant increase in the average size of farms throughout the United States. This being the case, there is an increasing emphasis on systematic planning within the farm industry in areas such as capital investment per acre, labor costs, and technological innovation. In an effort to minimize cost and to increase the financial attractiveness of agriculture, the industry is no longer restricted to only the raising of the crop but has expanded into all aspects of food production, packaging, and shipment. As the industry is becoming more horizontally and vertically integrated, the need for systematic planning and an understanding of the impact of technological change is great.

Throughout the United States there has been a very strong effort on the part of the Federal government to subsidize technological development in agriculture. Numerous agricultural research programs have been established throughout the country and the system of land grant colleges has served to foster agricultural change. In recent years, Federally-funded research

programs have expanded to address areas such as labor productivity, environmental control, and crop development. Through these efforts, the number of factors which are not under the control of the farmer are decreasing. The factors which are not under control of the farmer (e.g., temperature, rainfall, etc.) are still substantial, nonetheless. Given the growing national and international market for foodstuffs and the increasing emphasis placed on agricultural imports by the Third World Nations, the incentives for addressing and overcoming these technological problems through innovation are great.

The three arenas in which technological change may play itself out in agriculture are biological, mechanical, and a combination of biological and mechanical. Included in biological innovations are new methods of pest control, new crop varieties, etc. These innovations tend to be amenable to adoption by a wide range of farm sizes. Mechanical innovations are those which occur in land preparation and crop handling. Typically, mechanical innovations are most adaptable to large farms both because of the capital costs involved and the size of farm required. The combined biological/mechanical changes that may occur in agriculture are in areas such as irrigation and drainage and may be adopted by a large range of farm sizes.

One of the measures of the impact of technological change is in terms of input/output ratios. As may be seen in Figure 33, the output per labor-hour has risen dramatically in agriculture, far outstripping the increases per labor-hour in the nonfarm sector.

A second measure of the impact of technological change is in terms of the shift in the ratios between various inputs. The change in input ratios may be seen in Figure 34. As may be observed, while total inputs varied insignificantly from 1950 to 1970, labor input decreased to one-half its original size, while the use of fertilizers and liming materials tripled. A further example of the magnitude of the change in input ratios may be seen in terms of the amount of capital investment per farmworker which has risen from $3,000 to $46,000 per worker between 1940 and 1968.

The major impact of technological change in agriculture has been to reduce the amount of labor input per unit of crop. The impact of this may be seen in Figure 35. While the impact is to reduce the demand for labor in the harvest of the crops specified, this labor will not necessarily become unemployed. Unemployment of labor will be determined by factors such as shifts in crop acreage, multiple plantings, etc. The major impact of technological change will be in terms of the change in the required characteristics of workers employed in agriculture. This change is typically towards the requirement for a much higher skill level on the part of agricultural workers. Projections made at Cornell University indicate that the skilled-unskilled labor ratio in agriculture is expected to shift from 1:10 in 1967-68 to 1:4 in 1980. The implications of this shift for migrant agricultural workers is obvious.

FIGURE 33

OUTPUT PER LABOR-HOUR
1957-9=100

Year	Output per Labor-Hour	
	Farm	Nonfarm
1965	149.0	120.9
1960	110.7	103.8
1955	84.0	96.7
1950	64.1	82.4

(Source: U. S. Department of Agriculture)

FIGURE 34

SELECTED INDICES OF FARM INPUTS
1967=100

Year	Total	Labor	Mechanical Power and Machinery	Fertilizer and Liming Materials	Feed, Seed, and Livestock Purchases
1970	101	89	101	113	109
1965	97	109	95	80	92
1960	96	134	92	54	84
1955	101	170	93	45	73
1950	100	199	80	32	64

(Source: U. S. Department of Agriculture)

FIGURE 35

LABOR REQUIREMENTS UNDER ALTERNATIVE HARVESTING METHODS

Crop	Labor-Hours Per Acre Harvested	
	Manual	Machine
Peas	500	3
Green Beans	500	3
Large Carrots	160	6
Beets	120	6
Cabbage	40	25
Cauliflower	200	120
Onions	100	20
Spinach	56	3

(Source: "Technical Seminars on the Implications of Mechanization for Fruits and Vegetable Harvesting," Chicago, Illinois, November 8-10, 1968.)

With their present lack of occupational skills and the low levels of education, unemployment of migrant workers in agriculture may easily occur as a result of this technological change.

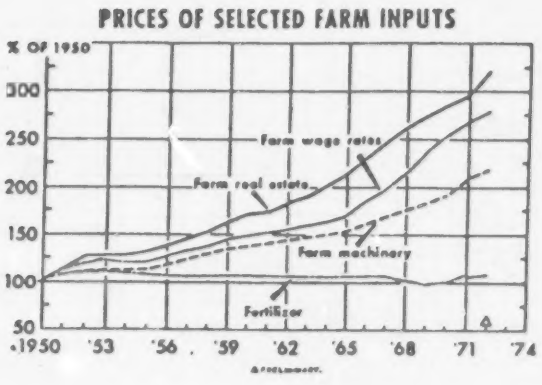
Relative price changes will also have an impact on the decision to pursue technological change. Figure 36 indicates that the farm wage rates have risen significantly more rapidly than the prices for farm machinery and fertilizer. This will result in a change in the amount of farm labor demanded (downward) and an increase in the utilization of fertilizer and farm machinery. The net result will be to encourage the development of technological innovations.

The following paragraphs describe briefly the likely impact of technological change and innovation on the crops with which Arizona-based migrant farmworkers are most closely allied.

Lettuce

Experimental harvesters have been developed which select lettuce heads mechanically and cut the head. Other experimental machines are in the developmental stage which permit precision planting and mechanical thinning. Commercial versions are not operational, however, and are not expected to be operational by 1980. When operational, they are expected to cost in the neighborhood of $20,000 and will displace approximately fifteen workers each.

FIGURE 36



(Source: U. S. Department of Agriculture)

Mechanization has entered the lettuce field, however, through the increasing use of mobile packing units. These packing units are mechanisms in the form of riding platforms for individuals performing the selection, cutting, and packaging operations. The impact of this mobile packing unit has not been to displace a significant number of workers.

Onions

The use of mechanized practices in bulb onion harvesting (undercutting and elevating after curing) has become dominant. Salad or spring onions, because of their delicate nature, are still hand-picked. No short-term change is seen in this position. The impact of this is that the crop which migrant workers prefer to pick (bulb onions) is increasingly mechanized, whereas the crop which migrant workers dislike most (green onions) is likely to continue in a hand-picking mode.

Celery

Celery is presently harvested by hand labor using mechanical aids. Cutting and stripping celery is accomplished by hand with the stalk being transferred to a waist-high conveyor belt perpendicular to the planted rows. Celery is a very likely candidate for full mechanization. The plant is relatively uniform in size and matures at a fairly common rate. Several successful commercial harvesters are in operation within the State of California. With the increasing cost of labor, it is anticipated that celery harvesting will be completely mechanized within the long-term future.

Apples

Apples are another crop in which Arizona migrant farmworkers play a major role. The apple segment of the agricultural industry has long recognized the need for mechanization since 40% of the production cost occurs in the harvesting phase. The major problem inhibiting the mechanization of harvesting is the problem of bruising the fruit. The experimental harvesting methods which have been developed all revolve around the shake-catch system in which apples are shaken off a limb or tree and are caught prior to reaching the ground. Because of present planting procedures, apple trees tend to overlap. Increasing the space between apple trees in order to permit mechanical harvesting will reduce the amount of yield per acre because of a decrease in the number of trees that may be planted. Thus, mechanization in the long-term will depend on the development of a thick-skinned fruit that is palatable and on tree training and planting patterns.

Citrus Fruits

The citrus industries, especially within the States of California and Florida, have been very active in terms of attempts to develop mechanical harvesting systems. These attempts have not met with a great degree of success for a number of reasons. First, there is frequently a significant amount of bruising and discoloration of the fruit through mechanical harvesting systems. Second, the initial capital costs of

mechanical harvesting systems are extremely high. Third, the conversion to a machine harvesting system for some varieties of oranges could result in the reduction in the labor supply available for the hand-picking required in other crops. Fourth, there is a high risk of obsolescence in the present mechanical harvesting systems. Most of the systems under development are still experimental and, until technological development has stabilized, growers will tend to remain reluctant to make the investment necessary.

In order for mechanization in the citrus industry to have a major impact, fundamental research in cultivation practices, tree shaping, environmental controls, maturation controls, and fruit detachment is necessary. Until these problems are solved, hand harvesting will be the standard of the industry. In the short-run, therefore, there is not likely any impact on the Arizona migrant farmworker of mechanical harvesting in the citrus industry.

Summary

In the short run (1977-1980), the overall implication of technological development on migrant farmworkers is minimal. In this period of time, growers/producers will not have the opportunity to make changes that will significantly effect the migrant worker. In the long run, however, the impacts will be substantial and will play themselves out in two areas — a

decrease in the labor-input/output ratio as well as a shift in the input ratios. This decrease in demand for migrant workers will result in either the displacement of workers or in a decrease in the wage rate. To the extent that one is inflexible (e.g., a minimum wage must be paid), the other will of necessity occur. At the same time that the demand for migrant labor is decreasing in general, there will be a shift in demand away from the unskilled farmworkers who are typically employed today to more highly skilled individuals who have the capability for operating and maintaining increasingly complex agricultural machinery and processes. The net impact in the long run, therefore, is highly negative for the current group of migrant farmworkers. While migrant labor will always be required due to the seasonality inherent in agriculture, the current migrant may soon be faced with an untenable situation unless protective steps are taken now.

CHAPTER 9

POLITICAL AND ENVIRONMENTAL FACTORS

The 1960's witnessed an unprecedented growth of social and protective legislation for seasonal agricultural farmworkers. The former has dealt primarily with the improvement of living conditions, health standards, and nutrition, as well as with a wide spectrum of educational needs, ranging from preschool and elementary programs to adult retraining activities aiding in resettlement. During the same time period, a variety of protective legislative efforts have been directed toward the improvement of interstate recruitment and travel, income maintenance, foreign labor controls, crew leader registration, housing and work conditions, child labor, and collective bargaining. While migrant workers and their families are technically covered by a large range of general legislation, the most significant and, too often, only impact has occurred through legislation which developed and funded programs specifically designed to alleviate problems peculiar to or especially pronounced in migrant families. Equally important to note is the fact that without categorical inclusion and delineation of funding percentages, migrant groups tend to be bypassed by the broader-based social legislation.

In the near future, present through 1980, it is unlikely that any radical departure from current policies affecting migrants will develop in the direction of severe diminution of present funding and efforts at the Federal level. It is also

unlikely that innovative programs will be created or expenditures increased. With some exceptions, social legislation has peaked in terms of both funding levels and overall scope of activity within the various Federal agencies involved. Recent Congressional action, as well as the stated priorities of the present administration, indicate renewed interest in educational development and funding levels may be expected to rise in the next five years. While housing programs in general may receive some added stimulus, it is as yet unclear as to what extent these may be expected to aid the particular housing requirements of migrants. Further action, either at the State or Federal level, in several protective legislative areas can also be anticipated in the next few years, with some actions already underway. Most significantly, renewed authority will be evident in: new regulation and improved enforcement of interstate labor exchange mechanisms, control of temporary foreign labor, development of collective bargaining rights for farmworkers, and more stringent codes for labor camp dwellings.

Generally, the tendency in both areas of legislation will be toward the refinement of existing legislation, the elimination of duplication, and the possible consolidation of related farm labor activities within certain jurisdictional areas. Less flexibility for substate entities will result from the rise in mandatory Federal provisions. The trend in administrative methods will involve increased activity in the setting of Federal standards. States will be left with the option of

adopting these standards or of developing provisions that surpass the minimum requirements. In the latter case, States will be able to assume the authority for administration and enforcement. In all cases, States will be allowed a great deal of flexibility in developing their own particular approaches for meeting the widely varying needs of their jurisdictional and territorial areas.

Economic Development, Employment, and Training

Interstate Labor Exchange

Existing legislation (Wagner-Peyser Act, Farm Labor Contractor Registration Act, Crew Leader Registration Act) has to date insufficiently addressed the problems in the area of Interstate Labor Exchange. Recruitment deadlines, specific and binding work orders, and greater opportunities for jobs, have been and will continue to be major concerns for migrant agricultural farmworkers. Some positive steps have been taken in this direction with the introduction of new DOL regulations. Earlier recruitment deadlines and requirements regarding work orders have been imposed for all contractors using State and regional employment services. This will provide more consistent work expectations thus aiding in work force stabilization and, over a period of time, possibly reducing the need for interstate migration. The new regulations do not go very far, however, in requiring or increasing related services to migrant laborers registered with employment offices. Continuing deficiencies in

these systems coupled with a somewhat more cognizant attitude of DOL, should result in further refinement of existing regulations as well as somewhat greater oversight ensuring adherence to registration requirements over the next few years.

Further action has been taken regarding the corollary problem of temporary foreign workers. New regulations, soon to go into effect, similarily demand much earlier recruitment request deadlines, in some cases up to six months prior to the need for labor. This will provide greater opportunity for domestic workers to take advantage of agricultural jobs and make it more difficult for labor contractors to push through last minute requests for certification of foreign labor. Continuing pressure can be expected for stricter adherence to the regulations in this problem area.

Past efforts to stem the flow of illegal foreign workers have been largely ineffective. The lack of penalties for contractors and businesses employing illegal aliens remains an area to be dealt with, though no new legislative action is likely in this area in the near future. Renewed efforts can be expected, however, toward specific international negotiations, especially with the South American nations. If such agreements are reached, more of the burden for regulating such workers will fall on the home country of the migrant.

Collective Bargaining and Minimum Wage

One of the most important issues that will continue to receive major attention in the next five years is the right of

farmworkers to bargain collectively. Though a series of heated debates regarding the character and scope of possible farm labor relations legislation is likely, the prospects for Federal action in this field are not promising at present and will probably not be forthcoming in this next time period, present to 1980. The more likely scenario is for expanded pressure on a State-by-State basis for adoption of bills similar to the farm labor relations act in California. It is probable that several States will adopt comparable statutes. This can be expected to result in an upgrading of salaries, benefits, living conditions, and job status.

While existing legislation (Fair Labor Standards Act Amendments of 1974) provides for staged increases in the minimum wage through 1978, it still fails to bring agricultural workers minimums to a par with the industrial minimum wage. Correction of this situation by 1980 seems unlikely, especially without collective bargaining rights.

Job Bills and Training Programs

The creation of a series of job bills is a virtual certainty over the next five years. These will, however, be limited in scope and duration and be much less comprehensive than provisions under such proposed acts as the Hawkins-Humphrey bill. The impact of these on seasonal agricultural farmworkers is likely to be minimal without their categorical inclusion or specific targeting toward rural areas.

Developments within DOL in the next few months (specifically its reaction to a pending suit regarding the failure to allocate the full 5% of CETA funds designated for migrants) should indicate future direction of CETA and Community Action Programs. Given the generally more sympathetic attitude and greater cognizance regarding migrant problems of new DOL leadership, a somewhat more responsive attitude may be expected in the development and support of manpower retraining and resettlement programs.

Income Maintenance

Statutory requirements at both the Federal and State levels have tended to specifically or effectively exclude migrant agricultural farmworkers from benefits provided by welfare programs; the Federal Unemployment Act; Workmen's Compensation; Federal Insurance Contributions Act (FICA); Old Age, Survivors, and Disability Insurance Act (OASDI); Aid to Families with Dependent Children (AFDC); and even Title II of the Comprehensive Employment and Training Act (1973). A large portion of such requirements is being eliminated at the Federal level, though action toward a federalized welfare system is extremely unlikely to materialize any time in the near future. The prospects for increased Federal pressure and/or legislative action curbing the ability of States to exclude migrant workers (either by effect or intention) from such benefits by various eligibility requirements seems somewhat better than in the past. Current Federal

legislative action indicates the likelihood of farmworker inclusion in unemployment insurance programs on a regular basis. Criteria, however, still tend to be somewhat restrictive and continue to exclude low yearly income groups, thus effectively eliminating most, if not all, migrant farmworkers. Pressure and initiation of litigation, where applicable, by agricultural labor organizations and legal action programs will continue to be an extremely important and vital element in any strategy for extending such benefits to seasonal agricultural workers.

Health and Nutrition

Initiatives for some form of national health insurance program should result in legislative action during the next few years. Preliminary stages are likely to consist of patchwork efforts to control health costs rather than a comprehensive health care package. As with other forms of social legislation, seasonal agricultural farmworkers will probably be the last group reached in any effective manner.

Presently, the extent of health care programs and funding at the Federal level do not provide adequate support to insure the meeting of health needs of migrant families. The development of Migrant Health Centers under the Health Act of 1975 is somewhat of an improvement over previous funding patterns, however. Under these programs, money is made available for high impact areas, currently defined as an area with 6,000 or more migrants,

for two or more months out of the year. Furthermore, these centers could form the core for more effective service delivery systems under a comprehensive national health insurance program should it evolve. It is also probable that the availability of health support services under medicare and medicaid will be extended to farmworkers on a regulatory, rather than an optional, basis.

Some positive actions have been made recently (e.g., the decision in Gutierrez vs. Butz, 1976) in the elimination of certain eligibility requirements for food stamp programs. Somewhat higher levels of funding for these services can be expected during the next five years. Further automation and computerization of the food stamp payment system will also speed up and systematize the process, though bureaucratic delays will not disappear overnight. Other existing food services (such as National School Lunch Program; School Breakfast Program; Special Supplemental Food for Women, Infants, and Children; etc.) will continue to provide certain nutritional benefits to migrant families, but no great expansion of program activities or funding is to be expected between the present and 1980.

Housing and Environment

The area of housing for migrant farmworkers is difficult to project due to the fact that funds are and have been available but have not been utilized by the agencies responsible for

these expenditures. (One estimate exists of ten million dollars available but not dispersed under the Farmers Home Administration.) There are no indications that major agricultural industries will begin to assume significant responsibility for the production and maintenance of farm housing units for workers. New and more stringent health standards (under OSHA) for labor camps will be forthcoming within the next year, however. Further advances in inspection and enforcement of standards can be expected if, as speculated, a single Federal standard, under one designated Federal agency, is developed. In such a case, States would still have the option of establishing higher standards and would then be allowed to enforce and administer these standards within their own jurisdiction.

All legislation concerning permanent housing expires this year. Thus, new activities in the production and rehabilitation of housing for low-income families is difficult to project. State and substate levels of activity in this area have shown some growth in recent years and States undoubtedly will continue to be pressed to become more directly involved with the housing problems of migrant laborers. As farmworker groups become more vocal and sophisticated in their advocacy efforts, it can be expected that State funds will be requested and more frequently mobilized for production purposes. It is still unrealistic, however, to project any radical change for the better in the serious housing shortage that continues to exist.

Concerns regarding the detrimental effects of pesticides on farm laborers have increased in recent years. The regulation of pesticides within farm labor will continue as an area of concern. Some increased activity in the identification and control of harmful agents can be expected in the next few years. Examination of a sample of seasonal farmworkers, mobile toxic investigative units, more stringent standards on pest control requirements, and the development of alternative pest control methods are approaches that are likely to be pursued at the Federal level. Again, Federal standards will be established with the option to States for imposing and enforcing more stringent local standards. Some further activity, with similar administrative methods, may also be forthcoming regarding other aspects of the work place environment (orchard, field, packing house, etc.) and its implications for farmworkers' health and safety.

Volunteers

One final area in which some rejuvenation of activity and reform of previous deficiencies may be expected lies within the area of volunteer services. Particularly relevant to migrant farm laborers will be VISTA programs under ACTION, which will most likely experience more support under the present administration than was true in the recent past.

CHAPTER 10

IMPLICATIONS FOR EDUCATION

Throughout the preceding nine chapters, much attention has been paid to the impact of each of the areas under consideration for the migrant education program. Rather than repeat all of those findings and results in this section, only those which are particularly relevant for the program on an overall basis will be identified here.

1. The size of the Migrant Education Program is likely to continue to increase. Among the factors resulting in this are that increased efforts have been put forth on the identification and recruitment of workers, and families have become increasingly aware of the existence and utility of the program. In addition, children are remaining in school for significantly longer periods than was the case for their parents or even their older siblings. The net result is that the Arizona Migrant Education Program should not anticipate a decline in the enrollment, but should continue its expansion efforts in an attempt to reach the increasing number of migrant students that will be eligible.
2. The students that are likely to be enrolled in the Arizona Migrant Education Program will be increasingly from families of settled-out migrant status.

The impact of this is significant. First, students will remain in the program for the full year and will not be leaving to join the migrant stream. Second, the longer children are enrolled in school programs, the more interest parents will have in the program. As a result, the program should expect increasing participation in migrant advisory councils and an increased level of volatility of the parents in terms of their demands on the program. Properly directed, this increasingly vocal and rising level of demand can be utilized to very greatly improve the educational quality for all migrant children within the State. Third, there will be increasing use of program services both inside and outside of the education program. The impact of this will be that increased levels of inter-program coordination will be necessary within the State in the coming four-year period.

3. As was described previously in Figure 12, large families are more likely to remain active in migrant agriculture than are small families. This is an unfortunate situation in that those families with the greatest number of problems and needs are those who will continue to migrate. Thus, a large number of children involved will tend to remain underserved as they move through the stream. Special efforts

must be put forth by the Arizona Migrant Education Program if the inherent inadequacies that these children face are to be addressed.

4. An increasing desire for adult education was expressed by numerous workers who were surveyed. At present, the average grade level completed is less than five years (4.83 years). Adults have been made increasingly aware of the necessity for higher levels of education if they are to compete effectively in the job market. The Arizona Migrant Education Program should anticipate, therefore, that increasing parent interest will not only be directed towards their children's education but will also be actualized in the demand for ongoing remedial training for adults.
5. The illegal-alien situation is likely to be increasingly addressed by Federal officials in the next four years. There is presently a Cabinet-level committee which is evaluating the impact of illegal aliens on all segments of society. One of the segments of society that is believed to be strongly impacted by illegal aliens is migrant farmworkers. This impaction occurs in two manners: first, migrant farmworkers are displaced from jobs in migrant agriculture, and, second, migrant farmworkers are displaced from their nonmigratory jobs and are forced to enter the stream. With increasing attention paid to this

situation by Federal officials, it is likely that some of the pressure will be removed and migrant farmworkers may begin to find additional jobs in their home State.

6. While the health needs of students are addressed in other sections of this needs assessment, it is essential to be aware that the pesticide problem is a very real one. As has been pointed out in numerous publications, the longer the migrant child or adult remains in the field, the higher the level of toxins which accumulate in the body. There is, therefore, an extremely great public health concern surrounding migrant farmworkers. Many of the toxins with which migrant farmworkers are in daily contact are very long-lived and slow-acting. It is highly likely, therefore, that the impact of these toxins on migrant farmworkers and children will not be known for some time in the future. When they are known, however, the impact could be extremely severe and will have a very deep effect on the education program.

SECTION B

ANALYSIS OF PROGRAMS AFFECTING ARIZONA'S MIGRANT FAMILIES

CHAPTER 1

PUBLIC PROGRAMS AFFECTING MIGRANT FAMILIES IN ARIZONA

The purpose of this chapter is to formulate a master list of programs which are specifically directed toward the needs of migrant children and their families. The list has two functions: (1) to serve as an organization tool for the analysis of program objectives and (2) to serve as a basis for a pamphlet for distribution to teachers with migrant children in their classrooms.

Before proceeding to the list, a few introductory comments are in order.

A. Definition of Migrant — There is no commonly recognized definition of the term migrant. Most definitions include individuals who at one time, though not necessarily at the time of receipt of services, travelled for purposes of employment in farmwork. Controversies in the definition center around the extent and recency of travel. The definition used in the needs assessment includes persons who must cross school district lines for at least overnight to obtain employment in farm labor. These persons may have migrated as much as five years ago and be classified as migrant.

B. Identification of Public Programs Directly or Indirectly Aiding Migrant Children — To highlight from among the unmanageable number of programs having the potential of aiding

migrant children those with the greatest saliency, immediacy, and relevance to this needs assessment, three tests were applied:

1. The program must be formalized by statute, articles of incorporation, or their organic act; i.e., it cannot be temporary, experimental, or subsidiary.
2. While the migrant child may be aided either directly or indirectly, the services provided by the public programs must primarily be direct services, i.e., those which lead to outcomes which are directly observable and measurable as to the extent to which they impact the daily living of the migrant and his family. Certain energy and transportation programs may affect the comfort, safety, and livelihood of this mobile population more than they affect the general citizenry, but the overall picture would be cluttered by the inclusion of every one of these and similar programs which provide indirect services or benefits to migrant families.
3. The services provided must directly or indirectly contribute to the mental, physical, emotional, and social growth of the migrant child.

C. Categorization of Programs — Programs are categorized under the following headings: (1) health; (2) housing; (3) legal; and (4) economic security, employment, or training.

Though a program may be primarily directed toward one function, a program often provides many other services. For this reason, the objectives and activities of each of the programs are provided. For example, the Migrant Opportunity Program, funded by the Department of Labor, is primarily directed toward training and job placement. The Migrant Opportunity Program also provides emergency food and housing assistance as well as family planning for migrant or seasonal farmworkers whether or not they participate in training.

The list of migrant programs is given in Figure 37. Each program is described in more detail in the fact sheets following the figure.

Methodology

A total of fifteen programs were visited by one of three interviewers during the months of January-March 1977. The program directors were asked to provide a written copy of the goals, objectives, and activities, if possible, as well as to describe problems encountered during the course of the year. Where published objectives were not available, a verbal account of the goals, objectives, and activities was requested.

FIGURE 37

PROGRAMS SERVING MIGRANT FAMILIES IN ARIZONA

Health

Yuma County Migrant Health Center, Somerton

Maricopa County Health Department, Avondale

Housing

Rural Housing Authority, Yuma and Casa Grande

Legal

Legal Services for Farmworkers, El Mirage

Economic Security, Employment, or Training

Department of Economic Security, Monitor Advocate Unit, Phoenix

Navajo Migrant Opportunity Program, Fort Defiance

Migrant Opportunity Program, Phoenix

Portable Practical Education Preparation, Inc. (PPEP), Tucson

PROGRAMS SERVING MIGRANT
FAMILIES IN ARIZONA — HEALTH

Yuma County Migrant Health Center

ADDRESS: Somerton, Arizona 85350

PHONE: (602) 627-2051

FUNDING SOURCE: Migrant Health Program (U. S. Department of Health, Education, and Welfare)
(Fee for services)

GOAL:

- Provide quality medical care for southern Yuma County

OBJECTIVES:

- Establish a dental clinic by July 1, 1977
- Increase medical services by 50% by July 1, 1977
- Establish a full control financial management system by July 1, 1977
- Prepare and implement a policy and procedure manual by July 1, 1977
- Prepare and implement a management system manual by July 1, 1977
- Finalize procedure for state license by July 1, 1977
- Institute consolidated system for recording patient care data by July 1, 1977
- Inaugurate public awareness program by July 1, 1977
- Increase revenue of third party payments by July 1, 1977

ACTIVITIES:

- General practice
- Dental clinic, July 1, 1977
- Baby clinic

ELIGIBILITY:

- Ability to pay criteria
- Migrant - worked outside county in last year at least overnight
- Seasonal - agriculture work reported as seasonal by employer

PROGRAMS SERVING MIGRANT
FAMILIES IN ARIZONA — HEALTH

Maricopa County Health Department
Avondale Primary Care Center

ADDRESS: 1610 N. Eighth Street
Avondale, Arizona 85323

PHONE: (602) 932-3600

FUNDING SOURCE: Maricopa County Health Department

Migrant Health Program (U. S. Department of Health, Education, and Welfare)

GOAL:

- Quality medical care for southwest portion of Maricopa County

OBJECTIVES:

- Develop a health care profile of the migrant population including demographic lifestyle factors and health utilization patterns by June 30, 1977
- Increase by 20%, to 6,580, the number of migrants using the primary care center system by June 30, 1977
- Increase the involvement of the Migrant Advisory Board by June 30, 1977
- Develop and implement by June 30, 1977, education programs in (1) Nutrition and (2) Family Planning, the high priority areas as determined by the Board

ACTIVITIES:

- Outpatient Primary Care Clinic

ELIGIBILITY:

- Seasonal farmworker — engaged in agricultural work for at least 2 months in the last 2 years
- Migrant — worked outside of Maricopa County doing agricultural work, remaining outside the county overnight or longer

PROGRAMS SERVING MIGRANT
FAMILIES IN ARIZONA — HOUSING

Rural Housing Alliance

ADDRESS: Office in Yuma: Yuma County Housing Authority

Office in Casa Grande: Pinal County Housing Authority

PHONE: (602) 782-3824 (Yuma)
(602) 723-4171 (Casa Grande)

FUNDING SOURCE: Rural Housing Alliance

GOAL:

- To provide decent, safe, and sanitary housing for farm labor in Arizona

OBJECTIVES:

- Rehabilitate 50 units of farm labor housing at the 11-mile junction in central Arizona by July 1, 1977
- Rehabilitate 40 units in Yuma County by July 1, 1977

ACTIVITIES:

- Identify community housing needs
- Assist in obtaining necessary resources for new housing
- Assist in obtaining necessary resources for housing improvement

ELIGIBILITY:

- Farm labor
- A maximum of 80% of median family income as defined by OMB Guidelines
- Family, not single individual

PROGRAMS SERVING MIGRANT
FAMILIES IN ARIZONA — LEGAL

Legal Services for Farmworkers

ADDRESS: 12221 N. W. Grand Avenue
El Mirage, Arizona 85335

PHONE: (602) 974-5854

FUNDING SOURCE: U. S. Legal Services Corporation

GOAL:

- Provide legal services for migrant and seasonal farmworkers

OBJECTIVES:

- No specific objective

ACTIVITIES:

- Cases concerning:
  - Employment problems, such as claims for unpaid wages, violations of the minimum wage law, illegal deductions, and bad or unsafe working conditions
  - Medical bills and problems obtaining medical care
  - Immigration and deportation problems
  - Welfare and food stamp problems
  - Supplemental security income (S.S.I.) problems
  - Debt collection or problems with creditors or with contractors
  - Landlord/tenant and utility problems
  - Problems related to home, such as mortgage foreclosures and property taxes

- Public housing problems
- Financial responsibility or other problems which may cause loss of driver's license
- School cases

ELIGIBILITY:

- Fifty percent of income originated in farmwork during any of the last five years

PROGRAMS SERVING MIGRANT FAMILIES IN
ARIZONA — ECONOMIC SECURITY, EMPLOYMENT, TRAINING

Department of Economic Security
Monitor Advocate Unit

ADDRESS: 111 West Osborn
Phoenix, Arizona 85013

PHONE: (602) 271-3274

FUNDING SOURCE: U. S. Department of Labor

GOAL:

- Full range of manpower services for farmworkers equivalent to nonfarmworker services

OBJECTIVE:

- By September 30, 1976, and through fiscal year 1977, assure that a full range of services, such as counseling, testing, placement, etc., are provided to farmworkers

ACTIVITIES:

- Accept or assist in writing complaints concerning services provided by the Department of Economic Security and follow up on these complaints
- Refer complaints not related to the Department of Economic Security to other appropriate programs
- Develop and implement a plan for corrective action to provide services to migrant and seasonal farmworkers equivalent to services provided to all other applicants

ELIGIBILITY:

- Seasonal — person who worked at least 25 days in agriculture in the last 12 months for a scheduled period and less than 150 days for the same employer

- Migrant — a seasonal farmworker whose employment required travel such that the worker was not able to return to home the same day.

PROGRAMS SERVING MIGRANT FAMILIES IN
ARIZONA — ECONOMIC SECURITY, EMPLOYMENT, TRAINING

Navajo Migrant Opportunity Program

ADDRESS: P. O. Box 589
Fort Defiance, Arizona 86504

PHONE: (602) 729-5282

FUNDING SOURCE: Office of Native Americans Program (U. S. Department of Health, Education, and Welfare)

GOAL:

- Provide the necessary services for migrant Navajos working off the reservation that are comparable to services for persons on the reservation

OBJECTIVES:

- No specific objectives

ACTIVITIES:

- Employment referrals for each of the 102 chapters on the reservation (a chapter is equivalent to a town)
- Make the necessary arrangements to obtain the employment, such as:
  - transportation to job site
  - housing
  - day care
  - preschool
- Coordination with state programs when necessary

ELIGIBILITY:

- Navajo
- Income at or below the poverty level

PROGRAMS SERVING MIGRANT FAMILIES IN
ARIZONA — ECONOMIC SECURITY, EMPLOYMENT, TRAINING

Migrant Opportunity Program

ADDRESS: 6611 S. Central
Phoenix, Arizona 85040

PHONE: (602) 268-0293

FUNDING SOURCE: U. S. Department of Labor

GOAL:

- Provide an alternative to seasonal agriculture employment for those farmworkers who want to leave the field
- Improve the living and working conditions of those farmworkers who wish to remain in the field

OBJECTIVES:

- Direct Job Placement — 150 migrant and seasonal farmworkers (MSFWs) by July 1, 1977
- Indirect Job Placement — 221 MSFWs by July 1, 1977
- Obtained Employment — 49 MSFWs by July 1, 1977
- Orientation and Assessment — 155 MSFWs by July 1, 1977
- Classroom Training — 232 MSFWs, 65 of whom will have been carried over from 1976 program year
- Work Experience — 75 MSFWs, 23 of whom will have been carried over from 1976 program year
- On-the-Job-Training — 47 MSFWs, 8 of whom will have been carried over from 1976 program year
- Health/Medical Assistance — 70 MSFWs who are participants in manpower activities or services
- Relocation Assistance — 42 MSFWs who are participants in manpower activities or services

- Nutritional Assistance — 72 MSFWs who are participants in manpower activities or services
- Residential Support — 39 MSFWs who are participants in manpower activities or services
- Miscellaneous Trainee Support — 28 MSFWs who are participants in manpower activities or services
- Emergency Assistance — MSFWs who are not participants in manpower activities or services
- Transportation Assistance — 53 MSFWs who are participants in manpower activities or services. Participants in manpower activities will only be served through this service if they are transporting other participants
- Child Care — 2,213 days for MSFW dependents regardless of family participation in manpower activities or services
- Family Planning Services — 300 MSFWs regardless of their participation in manpower activities or services
- Referrals — 600 MSFWs regardless of their participation in manpower activities or services
- High School Assistance — 1,664 dependents of MSFWs, 827 of whom will have been carried over from 1976 program year
- College Assistance — 168 MSFWs or their dependents, 100 of whom will have been carried over from 1976 program

ACTIVITIES:

- Direct job placement
- Indirect job placement
- Orientation and assessment
- Classroom training
- Work experience
- On-the-Job-Training
- Health/medical funds assistance

- Relocation assistance
- Nutritional assistance
- Residential assistance
- Miscellaneous trainee support
- Emergency assistance
- Transportation assistance
- Child care
- Family planning services
- Referrals
- High school assistance
- College assistance

ELIGIBILITY:

- Eligibility for participation is limited to farmworkers and their dependents who have, during the 18 months preceding their application for enrollment:

  — received at least 50% of their total earned income as agricultural workers during any consecutive 12-month period,

  — been employed in agriculture on a seasonal basis (time spent and income earned by agricultural workers while employed in food-processing establishments may be counted as agriculture-related for eligibility purposes), and

  — been identified as economically disadvantaged as defined below:

    (1) member of a family which receives cash welfare payments, or

    (2) member of a family whose annual income in relation to family size does not exceed the OMB Poverty Guidelines.

PROGRAMS SERVING MIGRANT FAMILIES IN
ARIZONA -- ECONOMIC SECURITY, EMPLOYMENT, TRAINING

Portable Practical Education Preparation, Inc. (PPEP)

ADDRESS: 338 No. Granada Avenue
Tucson, Arizona 85705

PHONE: (602) 622-3553 — Office
(602) 622-2979 — Answering Service

FUNDING SOURCES: Committee for Economic Opportunity

Campesinos Unidos

Pima County Board of Supervisors

Governor's Discretionary Manpower Funds

Robert T. Wilson Foundation

Pima Manpower Consortium

United Way

Department of Health, Education, and Welfare

Meals for Millions Foundation

Migrant Opportunity Program

Council of La Raza

SEAGO

Private Contributions

GOAL:

- Provide services to rural economically disadvantaged persons primarily of Pima and Santa Cruz Counties.

OBJECTIVES:

- Direct Job Placement — 11 migrant or seasonal farmworkers (MSFWs) by July 1, 1977

- Indirect Job Placement — 18 MSFWs by July 1, 1977
- Obtained Employment — 3 MSFWs
- Classroom Training — 11 MSFWs, 1 of whom will have been carried over from 1976 program year
- Work Experience — 7 MSFWs, 2 of whom will have been carried over from the 1976 program year
- On-the-Job Training — 7 MSFWs, 3 of whom will have been carried over from 1976 program year
- Health/Medical Assistance — 6 MSFWs who are participants in manpower activities or services
- Relocation Assistance — 5 MSFWs who are participants in manpower activities or services
- Nutritional Assistance — 8 MSFWs who are participants in manpower activities or services
- Residential Support — 6 MSFWs who are participants in manpower activities or services
- Emergency Assistance — 30 MSFWs who are <u>not</u> participants in manpower activities or services
- Referrals — 42 MSFWs regardless of their participation in manpower activities or services
- High School Assistance — 83 dependents of MSFWs, 40 of whom will have been carried over from 1976 program year
- College Assistance — 12 MSFWs or their dependents, 7 of these will have been carried over from 1976 program year

ACTIVITIES:

- Day care
- Head Start
- Senior citizen
- English as a second language
- Home food production

- Manpower service
- Housing community development
- Rural transportation
- Nutrition
- Consumer education

ELIGIBILITY:

- Rural resident of Pima or Santa Cruz Counties or migrants having income below poverty level

CHAPTER 2

CONTENT ANALYSIS OF ARIZONA MIGRANT PROGRAM OBJECTIVES

In determining the effectiveness of a program, there must be a yardstick against which the program is measured. In most cases, this yardstick is the program's own objectives. Under the assumption that the more inclusive the evaluation system the greater the potential for program improvement, each of the program's objectives have been analyzed as an evaluation tool.

Industrial managers set specific production goals, expect their manufacturing and sales departments to yield a good return, and will go to great lengths to find out whether they have done so. When it comes to social programs, however, a good return (often stated in philanthropic terms such as "to better the lives of...") is desired, but rarely is it properly defined and even more rarely is there a like effort to measure the actual results. Program objectives provide the framework for specifying goals and measures of success. Adequate program objectives provide the guidelines for program direction and evaluation.

For each of the programs identified in the preceding chapter, the content of the objectives has been analyzed to determine whether or not it conveys the information essential for the assessment of the program. This analysis is presented in Figure 38.

FIGURE 38

CONTENT ANALYSIS OF ARIZONA MIGRANT PROGRAM OBJECTIVES

PROGRAM	WHO SERVED	WHAT IS DONE	WHAT SPECIFIC OUTCOME	HOW IT IS DONE	HOW SPECIFIC OUTCOME IS MEASURED	BY WHEN
Migrant Health Center - Yuma	Migrant or seasonal farmworkers and families	Medical and dental services	Improved medical and dental care for farmworkers	Outpatient clinic Dental clinic by July 1, 1977	Dental clinic Increased medical services by 50% Financial management system Policy and procedure manual Management system manual Finalize procedure for State license Inaugurate public awareness program Increased 3rd party payments	July 1, 1977 " " " " " " "
Maricopa County Health Department - Avondale	Migrant and seasonal farmworkers and families	Medical services	Improved health care of farmworkers	Primary care Outpatient clinic	Health care profile of migrant population Increase by 20% to 6580 the number of migrants using primary care Increase involvement of advisory board Develop and implement education programs in nutrition and family planning	June 30, 1977 " " "
Rural Housing Alliance - Casa Grande, Yuma	Farmworkers whether or not they are migrant or seasonal	Housing	Decent, safe, and sanitary housing for farmworkers	Loans Identify community housing needs Assist in obtaining necessary resources for new housing Assist in obtaining necessary resources for housing improvement	Rehabilitate 50 units of farm-labor housing at the 11-Mile Junction in Central Arizona Rehabilitate 40 units in Yuma City	July 1, 1977 "
Legal Services for Farmworkers-El Mirage	Farmworkers below median income and their families	Legal services	***	Cases as required	***	***
Department of Economic Security Monitor Advocate Unit	Migrant or seasonal farmworkers and families	Advocacy	Services provided for migrant or seasonal farmworkers equal in quality and quantity to services provided for all participants	Accept and assist in writing complaints Follow up complaints Referral Corrective action plan	Full range of services provided to migrant and seasonal farmworkers (MSFWs)	Sept. 30, 1976 and through fiscal year 1977

FIGURE 38 (CONT.)

CONTENT ANALYSIS OF ARIZONA MIGRANT PROGRAM OBJECTIVES

PROGRAM	WHO SERVED	WHAT IS DONE	WHAT SPECIFIC OUTCOME	HOW IT IS DONE	HOW SPECIFIC OUTCOME IS MEASURED	BY WHEN
Navajo Migrant Opportunity Program - Fort Defiance	Navajo migrant or seasonal farmworkers and their families	Manpower services	Living conditions off the reservation equivalent to conditions on the reservation	Employment referrals Housing assistance Coordination with State Preschool Day care	***	***
Migrant Opportunity Program (MOP)- Phoenix	Migrant or seasonal farmworkers and families	Manpower services	Alternative to farmwork Improved living and working conditions for farmworkers	Direct job placement Indirect job placement Obtained training Orientation and assessment Classroom training Work experience On-the-job training Health medical assistance Relocation assistance Nutritional assistance Residential support Miscellaneous trainee support Transportation assistance Child care Family planning Referrals High School College	150 MSFWs 221 MSFWs 49 MSFWs 155 MSFWs 232 MSFWs 75 MSFWs 47 MSFWs 70 participants 42 participants 72 participants 39 participants 28 participants 53 participants 2,213 days 300 MSFWs 600 MSFWs 1,664 dependents 168 MSFWs	July 1, 1977 " " " " " " " " " " " " " " " "
Portable Practical Education Preparation, Inc. (PPEP) - Tucson	Migrant or seasonal farmworkers and families Rural economically disadvantaged	Rural services	Improved living conditions for Pima County poor	Direct job placement Indirect job placement Obtained employment Classroom training Work experience On-the-job training Health/medical assistance Relocation assistance Nutritional assistance Residential support Emergency assistance Referrals High school assistance College assistance	11 MSFWs 18 MSFWs 3 MSFWs 11 MSFWs 7 MSFWs 7 MSFWs 6 MSFWs 5 MSFWs 8 MSFWs 6 MSFWs 30 MSFWs 42 MSFWs 83 dependents 12 MSFWs or dependents	July 1, 1977 " " " " " " " " " " " " "

A model for social-program objectives, emphasizing the interrelationship among necessary elements of an appropriate objective, is at the core of this analysis. For programs aiding Arizona's migrant families, objectives have been examined in terms of six determinants. The program objectives have been operationally translated into assessment-feasibility criteria. These criteria form the basis of the content analysis of objectives which is the central focus of this chapter. The six criteria are:

WHO receives this service?	Objectives should include a description of target group.
WHAT types of services are provided?	Broad categories of programs should be presented.
WHAT specific outcomes are desired for the program?	These should be defined in observable and measurable terms.
HOW is service delivery implemented?	Program components that lead to the specific outcomes should be presented.
HOW is the success of the desired specific outcomes measured?	Instruments and procedures used should be explained.
WHEN are the specific outcomes to be completed?	The date at which each of the outcomes should be completed is essential.

The statements have been analyzed by utilizing a grid with cells to accommodate the six essential elements of a program objective based on the model. Adequate and appropriate information, where given, is placed in an outline and highlighted in

the text. The symbol *** indicates either that insufficient information was presented in the statement or that the particular element did not exist in the statement.

The objectives under study were found to be deficient in some cases. For example, Legal Services for Farmworkers had identified no specific outcomes. Some suggested outcomes are:

XX percent of cases decided in favor of the farmworker
XX number of cases evaluated
XX number of cases brought to closure in a specific area of law

While only some of these suggested specific outcomes may be appropriate for legal services and others may be more appropriate, they serve as a model from which the objectives may be developed. Once specific outcomes are defined, a date by which the outcome will be achieved should be established and assigned.

The Department of Economic Security Monitor Advocate Unit does have a specific objective, i.e., "full range of services provided." The objective needs to be made more specific, however. Examples of more specific objectives are:

XX percent of farmworkers to receive testing
XX number of farmworkers interviewed
XX percent of farmworkers placed in a job

These specific outcomes, once established, also need dates by which they will be accomplished.

The Navajo Migrant Opportunity Program has also not provided specific outcomes. Possibilities are:

XX number of days of day care

XX employment referrals

XX number of persons assisted in locating housing

XX number of days of preschool training

These outcomes must have a date for completion assigned.

The objectives under study were found to adequately describe the target population and the types of services offered. Some of the programs had not expressed their desired program results as specific outcomes stated in behavioral terms; rather, they consisted of broad goals, not lending themselves to evaluation and objective assessment. To the extent that little emphasis was given to specific outcomes, it follows that the evaluation of the achievement of such outcomes may also be deficient.

CHAPTER 3

IMPLEMENTATION OF ARIZONA MIGRANT PROGRAMS

Chapter 3 is directed toward the purpose of examining the difficulties encountered by the programs in implementing their plans. The approach selected for the chapter is to first discuss the general difficulties encountered in the areas of health; housing; legal; and economic security, employment, and training. Second, the obstacles encountered by two representative programs are discussed. Third, suggested legislation that may help eliminate some of the obstacles is described. (We are using the term "legislation" generically. We recognize that in some instances, the needed action could come about through a change in practices, procedures, or regulations, not necessarily requiring a statutory mandate.)

Health

Information concerning the problems encountered by health agencies in Arizona was obtained from interviews with programs concerned with migrant workers as well as with state agencies serving migrants. The most pressing concerns are:

1. The health of the migrant worker is worse than that of the general population.
2. The extent of utilization of health services by migrants is unknown.
3. There has been no behavioral health needs assessment for migrants.

4. Funds earmarked for migrants are often not coordinated through county and state government offices.
5. There is a lack of adequate funds to implement full services throughout the state.
6. There is a fragmentation of mental health services between mental health, alcohol, and drug abuse programs.
7. The medical profession has become increasingly able to identify persons in high risk groups. There is a problem of transporting these persons to regional health centers as Arizona is sparsely populated and there are limited funds available for transportation.
8. There is an effort to change school immunization to county immunization. Migrants, in many cases, have not been reached under the existing approach.
9. There is less funding available for V. D. control. Migrants have a particular problem with V. D.
10. First-party payments create a burden for migrants. Payment of services by migrants increases the long-range costs of health.
11. The migrants cannot afford to take time off from work to obtain health services. There needs to be a way of recouping wages lost or of providing health services during non-working hours.
12. Money that was once earmarked for migrant health is being given over to rural health programs, thus perpetuating the exclusion of the migrant.

13. The nutrition of migrants is somewhat below the nutrition of the general population. Poor nutrition interferes with the migrant child's ability to perform in school.
14. There is a need for nutritional education in Arizona. Most migrant families both do not know what foods are needed for health and lack the resources to buy proper foods.
15. Health is viewed as the most urgent need by migrants themselves, next to money.

Housing

1. The housing codes in Arizona are often not enforced. Though there are laws requiring decent, safe, and sanitary housing for migrants, the conditions are seldom met.
2. There is inadequate housing near the fields where the migrants work.
3. When a migrant cannot obtain housing near the place of work, transportation becomes a problem. In particular, with the high cost of fuel, migrants have to pay more to get to their jobs. During the recent fuel shortage, some crops went unharvested because the laborers could not get to the fields.

Legal

1. Colleges in Arizona require residency for migrant farmworkers for a tuition reduction. Veterans and Indians are exempt from the residency requirement. It is felt that migrants fall into the same category as persons in the armed services, i.e., people who travel as a condition of their employment, and thus should be treated equally.
2. Some public schools in Maricopa County allow no credit for students who start late in the year.
3. The 1980 census will be taken in a month in which farmworkers will not be harvesting crops. The census questionnaire will ask a question concerning the respondent's last job. For a farmworker out of season, the response will not be "farmwork." The result will be a continuation of the undercount in the number of farmworkers.
4. There is exploitation of farmworkers by some contractors. The farmer will pay the contractor what would amount to an adequate wage for each of the laborers, but the contractor does not always pay the minimum wage.
5. The perception of the need for legal services by the farmworker is very low. In the Arizona assessment, only 3 out of 233 respondents indicated that legal services was a need.

Economic Security, Employment, Training

1. Migrants suffer particularly from lack of communication skills. Not only do they often not speak English, many cannot speak Spanish well. Many migrant farmworkers speak a language developed in their own subculture, limiting their ability to communicate with segments of society outside their own.
2. Mechanization of agriculture will ultimately leave few jobs available for migrants. Using 1967 as a base of 100, the use of manual labor in farmwork was 199 in 1950 and only 89 in 1970.
3. Irregular climatic conditions create a strain on migrants. For example, the freeze in the East and drought in the West during the 1976-1977 period has left fewer jobs for migrants.
4. There is a lack of a career ladder within agriculture. When a person begins working as a weeder, it is impossible to move to a better position, only to an equivalently low position.
5. Illegal aliens compete with citizen migrant workers for farmwork.
6. The interstate unemployment system is in need of improvement. It currently takes 6 weeks for a payment to reach the participant from out-of-state.

7. There is a problem in tracing the 18-month job history required for unemployment compensation. Many crew leaders do not keep a log.
8. The social unit for the migrant is the family. Because the family is all a child knows, the children follow the lifestyle of the parents, i.e., farmwork.
9. The migrant is familiar with daily payment of wages. Some would rather take a job that paid $10 per day than one paying $100 per week because they are familiar with providing food for their families on a daily basis.
10. Many migrants will leave training when crops need to be picked. For example, the Migrant Opportunity Program reported that training classes are virtually empty when there is lettuce to be picked.
11. Agencies not funded specifically for migrants sometimes have a lack of sensitivity to migrants. For example, the health clinics, which are already working beyond capacity, see no need to do outreach to provide health services to still more people that are farmworkers.
12. High school children in Arizona must pay for their own books. This amounts to between $20 and $100 per student per year. For the migrant, even $20 is a formidable amount. The cost reinforces keeping high school age children out of school.

13. In 1971, the need for a mother and a child on welfare was calculated to be $180 per month. The state legislature has apportioned 70% of that or $126 per month. With inflation, this accounts for 49% of the need.
14. Present policies in unemployment do not recognize differences between migrant and other clientele. For example, the effort required to find work is different for the farmworker than for the general population.
15. Migrants begin to work full time in the fields at the age of 14. Therefore, most do not have the minimum skills required to obtain a job outside of farmwork.

Problems of Specific Migrant Programs

In some cases, the problems encountered by a particular program differ from the general problems encountered in the areas of health, housing, legal, and economic security. Two such programs are the Migrant Opportunity Program and the Monitor Advocate Unit of the Department of Economic Security.

Migrant Opportunity Program (MOP)

Since the Migrant Opportunity Program (MOP) is a statewide agency, its problems and concerns are directed at discrepancies throughout the state. One concern is the inconsistences in the definition of migrant. MOP considers

a person a migrant on the basis of the most recent 18-month work history. The Legal Services for Farmworkers and the Migrant Child Education Program use the most recent 5 years. The differences in definition between programs lead to unnecessary shuffling of clients and the ultimate disenchantment of the client with social service programs.

MOP encountered the problem of not knowing how many migrants or seasonal farmworkers require services. Incomplete knowledge of the target population size leads easily to funding discrepancies. In addition, planning becomes difficult without the essential information concerning the distribution of the target population throughout the state.

Another obstacle encountered by the Migrant Opportunity Program is the available funding from only one source. Since the program must compete for those funds each year, cooperation with other agencies poses a potential threat to funding. Each program with whom they cooperate may be the program funded in place of MOP in the following year. In addition, with only one funding source, all activities must be directed toward employment and training. When the program was funded by OEO (it is now funded by DOL), a variety of services were offered. Under DOL, many needs must remain unmet.

Department of Economic Security, Monitor Advocate Unit

The Monitor Advocate Unit of the Department of Economic Security experienced major difficulties in 1976. With recent

changes in the Judge Richey Court Order, however, some of the problems have been alleviated. In 1976, the unit assisted in writing all complaints of farmworkers whether or not the complaint concerned the Department of Economic Security. Each of these complaints was accepted and followed up. In FY 1977-78, the Monitor Advocate Unit is responsible only for complaints concerning the Department of Economic Security with other issues referred to the appropriate agency as necessary.

The Monitor Advocate Unit experiences some difficulty because the central office in Maricopa County sees few farmworkers. The Monitor Advocate must do extensive travelling to oversee the activities of the 12 offices across the state.

One of the more serious problems encountered is the difficulty in providing counseling for farmworkers who are mobile and who change residence from week to week. A mobile van assigned the task of providing the DES services statewide reported that a client encountered during one visit of the mobile van was often found to be unavailable for the next visit of the van. Even bringing the services to the site of the migrant worker has not solved the problem of serving a mobile population.

Possible Changes in Legislation Required to Facilitate Implementation of Migrant Program Plans

The suggested changes in legislation have been obtained from a close examination of the problems encountered by migrant

programs in Arizona. In many cases, legislation is already available. Enforcement, however, requires more than simply passing the law. The registration of crew leaders, for example, though required, is difficult to enforce. The following suggestions concern themselves only with new legislation. The issue of enforcement of existing legislation is not addressed here.

1. Elimination of first-party payment for health care of migrants.
2. Implementation of a coordinated health system throughout the state. The system would address the problem of one migrant receiving health care in two different counties without either county knowing what services were provided by the other.
3. Increased efficiency in unemployment insurance benefits for out-of-state claims.
4. Removal of the residency requirement for migrants admitted to Arizona colleges.
5. An arrangement by which high school students can obtain credit for a class when they arrive late in the school year.
6. Change in the required number of days worked for a migrant to receive unemployment insurance.

Though the list of suggested legislation that would help implement plans for migrant programs is not comprehensive, it

does concern some of the major unaddressed problems. Some of the concerns mentioned may be more easily solved with a change in policy or by implementation of a special procedure. Examples are the high school credit policy or a procedure for exchanging health records between clinics. However, these problems that are addressed cannot be solved unless someone is made aware that the problems exist.

For others, a legislative action would be required. Given a knowledge of the existing deficiencies and a willingness on the part of decisionmakers to have social services as available in actuality for migrant farmworkers as they are for the general population, steps may be taken that will ensure that the children will not be forced to remain in the migrant stream but will be faced with a choice not circumstances.

SECTION C

THE RELATIONSHIP BETWEEN SOCIETAL CONDITIONS AND THE IDENTIFIED NEEDS OF ARIZONA'S MIGRANT STUDENTS IN 1980

CHAPTER 1

INTRODUCTION AND SUMMARY

The methodology for determining the ways the educational needs of migrant children are likely to differ in 1980 from current needs centered around a Delphi exercise, involving a panel of nine experts.

The Delphi method allows experts to systematically communicate with each other anonymously about a complex problem -- in this case, the relationship between societal conditions and educational needs of migrant children. Individuals are interrogated by a sequence of questionnaires in which the responses to one questionnaire are used to produce the next one. The resulting atmosphere of a Delphi is that of a communication process as opposed to a poll since individuals have the opportunity to change earlier views and benefit from the contributions of others (unbiased by psychological factors). In recent years, the Delphi method has become a standard approach in many organizations for conducting efforts in forecasting, planning, assessment, and national policy analysis.

The exercise consisted of three rounds. The rounds were constructed in the following manner:

ROUND	OBJECTIVES	INFORMATION MATERIALS PROVIDED PANEL MEMBERS
1	Public programs affecting migrant families, societal conditions affecting public programs, how overall context is likely to change over next five years	Basic information about migrant education, excerpt from Arizona's Request for Proposal listing the eight research questions being studied in this needs assessment, a list of national programs which offer services to migrants
2	Possible constraints on society's response capability; recapitulation and refinement of previous responses (some individualized)	"Post-Affluence: The Turbulent Transition to a Post-Industrial Society," by Gary Gappert, appearing in the October 1974 issue of The Futurist (reproduced by permission of the World Future Society)
3	Preliminary and summary results of the educational needs assessment in Arizona and how existing needs are likely to change during the next five years; feedback from Round 1 to obtain crystallization and clarification	Excerpts from a report presenting results of the cognitive, affective, and psychomotor tests

The listing of panel members is provided at the end of this chapter.

Panelists received modest remuneration for each Response Sheet returned to the project staff, plus a bonus if all three Response Sheets were completed and returned by the deadline. Payments were made to the participants, his or her organization, or to a charity at each panel member's option.

In compiling this report, responses from the expert panelists were interpreted, expanded, and qualified by information obtained from tests administered to migrant and nonmigrant students in Arizona, other surveys and analyses comprising the needs assessment, interviews with program administrators and others in contact with migrant issues and programs, and library research concerning emerging public policy developments.

A total of twenty-six persons were invited to participate in the study. The initial group consisted of sixteen persons. Of this group, eight indicated they would be unwilling or unable to participate. They did, however, recommend other persons who might be interested. A second group consisting of ten persons was invited to participate. Of this group, two expressed a willingness to join the panel. In total, the panel was made up of nine persons. Initially, we were hoping to be able to attract eight to twelve participants for the panel so as to obtain as wide a variety of opinions as possible. As it turned out, the diversity we were seeking did materialize in the makeup of the panel.

Three of the panelists were college professors with disciplines in political science, economics, and education. A fourth panelist was a journalist who has authored several books on migrant farmworkers and illegal aliens. The fifth panelist was a nutritionist employed by a State-sponsored health agency serving migrants. The sixth panelist was a nationally recognized consultant in the field of migrant education who spent several years in the migrant stream as an itinerant tutor. The seventh

panelist was a well-known socioeconomist, author, and lecturer. The eighth panelist was the president of a library research company who has conducted numerous bibliographical studies on migrant education. The ninth panelist was a director of a statewide migrant education training center affiliated with a State university.

The Delphi exercise generated the following predictions concerning the relationship between societal conditions and the identified needs of Arizona's migrant students in 1980:

- There could be some changes in the structure of present government programs such as the Office of Education.
- Some new programs might be added which could impact the migrant family.
- There could be more of an emphasis placed on the development of rural areas.
- The new administration in Washington could impact migrant programs by streamlining services as well as being an advocate for the development of some new social programs.
- There will not be any major societal changes occurring by 1980 which will impact migrant families.
- Should the country enter into an era of post-affluence or declining resources, migrants would probably suffer the consequences more so than the general population.

EXPERT MEMBERS OF THE DELPHI PANEL
PARTICIPATING IN THIS STUDY

Dr. Gary G. Bitter, Associate Professor of Education, Arizona State University

Dr. Vernon M. Briggs, Jr., Professor of Economics, University of Texas

Mrs. Marta Cotera, President, Information Systems Development, a library research company, Austin, Texas

Dr. Conley H. Dillon, Professor of Government and Politics, University of Maryland

Mr. Edward L. Klumpp, Research Associates, Kirschner Associates, Inc., Washington, D. C.; project director for D. A. Lewis Associates' needs assessment for Florida's migrant students, 1975-76.

Dr. Gloria Mattera, Director, New York State Migrant Center, State University College

Mr. Eugene Nelson, journalist, author of Huelga (a novel about farmworker labor struggles), labor organizer, Forestville, California

Ms. Beverly Norton, Health Coordinator, New York State Migrant Child Care Program, Department of Agriculture and Markets

Mr. Robert Theobald, Socioeconomist, author, lecturer, publisher, consultant, Wickenburg, Arizona

CHAPTER 2

SOCIETAL CONDITIONS IN 1980

In Round 1 of the Delphi exercise, panel members were asked to predict changes that would occur in programs directly affecting migrant families in Arizona and to identify any dramatic social developments likely to occur by 1980. Their responses were refined in Round 2 by further developing a statement embodying the emerging consensus, indicating agreement or disagreement, providing facts and authorities to back up points, and discussing in greater detail and with more specificity the trends and developments seen to be unfolding. Also in Round 2 panelists were asked to consider the possible constraints that migrant families might face in light of "Post-Affluence". (The idea that the United States is facing a period of declining affluence was introduced.) In Round 3, panelists were provided with a copy of excerpts from a report for the State of Florida on "Educational Needs Assessment for Migrant Students." Preliminary test results on Arizona's migrant children indicated similarities with those of migrant children tested in Florida during a needs assessment conducted in 1975-76. The Florida report was used due to the fact that the computerized analysis of Arizona's test results had not been completed at the time Round 3 was mailed to the panelists. This report was used merely to prime the panelist's thinking as it relates to educational and education-related needs of migrant students. The

results of this reiterative input to and responses from the experts concerning societal conditions in 1980 are reported in this section.

Developments in Public Programs Affecting Migrant Families in Arizona

In Section B, we identified a number of programs directly affecting migrant families in the State of Arizona. In this substudy, we are concerned with changes which are likely to occur in these programs (phasing out or combining of existing programs, program growth or new directions, new programs), and their timing and interrelationships.

The most significant program development the panel feels to be likely to occur during the next few years is the formation of a cabinet level Department of Education. With the forming of this department, there may emerge the creation of a Migrant Education Division which would specifically relate to the needs of migrant education.

It was felt by a majority of panel members that a minimum guaranteed income would be one of the programs introduced. Past administrations have proposed similar type programs. The Nixon Administration proposed a family assistance plan of $2,400 for a family of four (1974). Prior to that, a supplementary benefits program was introduced and implemented in 1972. The net result of these earlier efforts will be the gradual development and implementation of a guaranteed income program.

In order for the program to gain total acceptance, it will only cover certain groups such as unemployed handicapped adults. Later this coverage will be extended to all other poor people. Eventually, migrants would also be included. By phasing in the program gradually, it would not appear to be too costly or wasteful.

A national health insurance program is also certain to be adopted in the near future. As one panelist phrased it:

> "National health insurance will become a reality because the middle class can no longer afford to be seriously ill."

Poor people have always faced a variety of problems which the middle class are now beginning to encounter. Hard drug usage has been a way of life in many urban slums for decades. It was not until middle-class youth started experimenting with drugs that the government really attempted to combat the problem. Likewise, migrants and poor people in general have been unable to obtain adequate medical treatment for years. With the middle class now facing the same problem, the government might step in with a national health insurance plan and, as a result, bring better services to migrants. It was felt by some panelists that existing mechanisms, such as migrant health clinics, would be used to implement this health plan. An indirect positive result would be the emphasis on preventive health education, screening, and treatment. On the negative

side, some panelists felt a factor which might delay the implementation of national health insurance would be the present problems with Medicare and Medicaid programs. Because of abuses by some health providers which have caused cost overruns in these programs, Congress might be leery of a new program which could appear to be funneling more money into a proven problem area. One panelist felt that, in place of a national health insurance program, the government might try experimenting with a program which would only cover major medical costs.

Another major program which could become a reality within the near future would be the passage of full employment and training legislation, commonly referred to as a "jobs bill." It was felt the new administration is more concerned with unemployment than with inflation; therefore, a jobs bill would not be considered detrimental to the general economy. One panelist felt the balance between inflation and increased economic growth is delicate. The creation of a jobs bill would, therefore, have to be coupled with price and wage restraints. Most panel members felt that a jobs bill would be highly beneficial to the welfare of migrant families by providing employment during the nonmigrating season.

The development of a rural infrastructure was also felt to be important and a possible reality in the near future. The government has recently been placing more importance on the development of rural areas with the 1972 passage of the Rural

Development Act, and the establishment of the Rural Development office within the Department of Health, Education, and Welfare. At present, some states are forming regional alliances. These will later grow into a formal rural socioeconomic infrastructure geared to a regional framework. Through the development of a rural infrastructure, there would be an assurance that growth is planned in both urban and rural areas. Throughout the years, as economic opportunities changed, people tended to migrate from one area to the other. When it became unprofitable for people to make a living by farming the small family plot, there was a tendency for these displaced farmers to move to the cities in search of more stable employment. In many instances, people were merely trading a rural, impoverished life for a place in an urban slum. As life became unbearable in the large cities, these same people or their descendants tended to move out of the city to the suburban or rural area. In recent years, many migrant workers have followed this same path by leaving the migrant stream and settling in the large metropolitan areas. As persons with higher incomes left the cities for life in the suburbs, poor people were once again left to cope with insurmountable problems caused by the decaying inner cities and a declining tax base. The development of a rural infrastructure policy would attempt to foretell some of these problems prior to their occurrence. An attempt would be made to equalize opportunities in both rural and urban areas.

A comprehensive planning program would assure that service delivery mechanisms are planned well in advance of shifts in the population.

Effects of New Administration in Washington

In view of the fact there is a new Administration, we asked the panel to elaborate on the possible effects which could be felt by migrant programs as a result of changes in expenditures or creation or demise of new programs. Most panelists felt the new Administration would not hurt present programs. It was felt generally that there would be a streamlining of services so as to avoid costly duplication. Some cuts in funding which the Administration has advocated would be resisted by Congress. An example of this would be the proposed curtailment in spending for the flood control projects which the Administration had advocated abandoning. On the other hand, it was also felt the Administration would resist any cuts in funding proposed by Congress. Besides the continued funding of present programs, it was felt the new Administration would be instrumental in advocating for the creation of new programs. Examples of these would be a thrust toward a rural policy which would have the effect of balancing urban and rural growth, the passage of a national income maintenance plan, coverage of farmworkers under the National Labor Relations Act, passage of a national health insurance plan, and increased expenditures in housing. It was also felt that

tougher enforcement of federal standards would benefit the migrant by assuring compliance with previously stated program objectives.

Effects of Zero-Base Budgeting

The new Administration has proposed using zero-base budgeting (ZBB) as a means of determining program priorities and funding levels. As an adjunct to their response on the new Administration's effect on migrant programs, we asked panelists whether they felt zero-base budgeting would hamper migrant programs. Panel members felt that it will take a few years for zero-base budgeting to become fully operational. By that time, the bureaucracy will adjust so as to encompass this new process into its operations. As a result of ZBB, some programs which had not been serving migrants adequately will be phased out. Their loss, however, will be minimal, with many of their functions being absorbed by other programs. In a negative sense, it was felt by one panel member that ZBB could be disastrous for some programs currently serving migrants which tend to be treatment-oriented. Because of unpredictable weather and crop conditions, it is necessary for these programs to react to a situation once it becomes a problem. It is difficult, for example, for a migrant health project to predict the number of persons it will be treating during a given work season. If the crops are bad, only 1,000 migrants will be served. On the other

hand, if crops are good, they may be required to serve 10,000 migrants when they had budgeted for only 5,000.

Migrant Education

Migrant education will probably not suffer any significant set-backs under the new Administration. In Round 1 of the Delphi exercise, panelists were asked to predict changes which might occur in migrant education during the next four years. With the exception of the last response, most panelists felt changes occurring would be positive. The following is a consolidation of ideas expressed by panelists:

- Title I Migrant Education Program will become its own bureau with additional staff and expansion of services to cover infant and adult family members.
- New educational programming for general education will utilize the exemplary programs developed and piloted through migrant education. The tutorial outreach approach which has been successful in migrant programs could be adapted to a rural situation.
- Possibility of combining Title I and Title VII funds at the local level exists. There might not be extensive coordination of other services because local programs are accustomed to their own autonomy.
- There will be a new Department of Education, separate from HEW. Expanded support for educational programs

for mino ities will be stressed. More emphasis will be placed on family spending/consumer-type programs which will stress self-reliance. There would be a strong possibility of emphasizing career education which would stress consumer awareness for adults. A strong accountability component to insure States involvement would be included.

- There will be more emphasis on the education of adult migrant students. Vocational education will also be stressed.
- Should the socioeconomic situation worsen, the lack of political impact will downgrade migrant programs and make it easier for funding to be decreased or used in other areas.

Other Program Developments

Panelists were provided in Round 1 of the Delphi exercise with a listing of social programs directly affecting migrant families. The majority of the panel felt there would be no foreseeable change in other educational programs not directly tied to the Office of Education, Migrant Branch. It was felt that other social programs would probably continue providing the same level of funding and services as seen in past years. The only predicted major changes would probably occur in the areas of migrant health and nutrition. There might be a consolidation of migrant health with other health programs. It

was felt that an increase in health funds would also lead to a consolidation of nutritional programs with those dealing in preventive health.

Dramatic Social Developments Occurring by 1980

The panel did not really foresee any dramatic societal changes occurring by 1980 which could impact migrant workers in a significant manner. The two predicted changes mentioned most often by half of the panel were the unionization of farmworkers and the reinstitution of a bracero or guest-worker program. The other most frequently mentioned predicted change was the incidence of farmworkers leaving the migrant stream. Some felt migrants would simply settle-out in urban and rural areas. Others felt farmworkers would be pushed out of the migrant stream by an influx of undocumented workers (illegal aliens) into this country.

When looking closely at these three areas of predicted change, it is interesting to note that all three are interrelated. The unionization of farmworkers would make wages and working conditions in agriculture more attractive, thereby attracting both guest workers and illegal aliens. Unionization might also mean that it would be unprofitable for farmers to hire American farmworkers. This might lead farmers to hire illegal aliens or advocate for the reinstitution of a bracero program. American farmworkers might at the same time decide there is too much job competition in agricultural work as a

result of the influx of both legal and illegal-alien workers and decide to leave the migrant stream.

Effects of Post-Affluence

In Round 2 panelists were asked to consider the effects of post-affluence. Having been provided with a copy of an article titled "Post-Affluence: The Turbulent Transition to a Post-Industrial Society," by Gary Gappert, the panelists were asked to consider the consequences that migrants might face should the United States enter into an era characterized by belt-tightening, shortages, and severe constraints on growth. (Paul and Barbara Ehrlich titled a 1974 book on this theme, End of Affluence. Governor Brown of California refers to this phenomenon as the "Era of Limits.") The Gappert article, which appeared originally in the October 1974 issue of The Futurist, was used to prime the panelists' thinking in regard to this subject matter. The panel was asked specifically: what long-range implications would an era of post-affluence have on the (a) reliance on migratory workers (would there be more of a demand), (b) the plight of migratory workers (would there be more workers than jobs), (c) society's sense of responsibility for serving migrant families.

The panel collectively felt there would be more of a reliance on migrant workers. Because of belt-tightening, farmers would have fewer dollars to mechanize. As the population

increased, there would be more of a demand for agricultural products. Migrants would, however, have to face stiff competition for existing jobs. Because of fewer dollars available, there might be fewer jobs available for other nonskilled members of society, thereby forcing these persons, as well as illegal aliens, to enter the migrant stream. With more families involved in agricultural work, there would be more migrant students requiring services from the present educational system. With more migrants in the stream, employers might be less able to provide adequate fringe benefits, thereby forcing government agencies to meet this obligation.

While the panel felt there would be more of a demand for migrant farmworkers, they also felt the plight of migratory workers would be increased should this country enter into a period of post-affluence. The average consumer would have less money to spend for food; therefore, there would be a high demand for low cost foods. This, in turn, would result in lower wages for farmworkers. It was felt that the economic gap between farmworkers and the other segments of society would continue to widen. On the positive side, one panelist felt unionization might help migrants. There might also be a move on the part of society toward a more egalitarian attitude toward migrants. Another panel member felt that if the government stepped in to help the migrant, disastrous consequences could be avoided in the migrant's future.

On the question of society's sense of responsibility toward serving the migrant, most panel members felt that, as jobs became more scarce for other members of society, the migrant would find greater competition in the job market. There might be a cutback in social programs as well as a closer scrutiny on the part of government officials in an attempt to ferret out false claims to these services. On the positive side, one panelist felt that as other members of society became more poor, they might be more apt to understand the migrant's plight. Another panel member felt some government bureaucrats who administer migrant programs would lobby for the continuance of these programs so as to keep their own jobs, thereby creating an indirect benefit for migrants.

As a follow up to their responses on the effects of post-affluence on migrants, we asked the panel to provide us with their views of what would happen to government services should the bureaucracy be faced with the situation of having fewer dollars to fund these programs. More specifically, we asked the panel to provide us with a listing of the programs most likely to be retained by the government. It was felt that most programs currently serving migrants would be kept. An important change would come about in the way these programs would be administered. With fewer program dollars available, delivery mechanisms would be streamlined so as to obtain the optimum amount of services per program dollar.

Another change would center around the increase or concentration of some services which could indirectly eliminate the need for other services. An example of this would be the passage of an income maintenance plan which would enable some farmworkers to drop out of the migrant stream. The adoption of a national health insurance plan would enable migrant families to have access to preventive health services, thereby eliminating the need for costly medical treatment. Unionization and coverage of farmworkers under the National Labor Relations Act would enable farmworkers to strive for higher wages, thus eliminating the need for them to receive other government services. Some changes, such as the proposed dropping of fees for food stamp recipients, would benefit migrants by eliminating burdensome rules.

CHAPTER 3

EDUCATIONAL NEEDS OF ARIZONA'S MIGRANT STUDENTS IN 1980

Experts from various disciplines were given basic data regarding the migrant students and were asked to make predictions relating to needs which would be more (or less) pronounced by 1980 and needs not now existing which would emerge by 1980, as well as to comment on any suspected or potential needs they felt had possibly been overlooked or underemphasized in our analysis to date. They were also asked to elaborate further in terms of —

- how educational needs of migrant students are likely to differ in 1980 from current needs,
- what are the relationships between identified needs and future societal conditions, and
- predicted changes in social conditions which may lead to development of needs which are currently nonexistent.

In addition, they were requested to pose recommendations for consideration by the project research staff to incorporate into reports to the Arizona client agency. These recommendations are reflected in the section to follow. In this section, we present an integration of their responses with other study findings in relation to the seven behavioral domains.

Current Educational Needs and Predicted Societal Conditions in 1980

Possibly the single most important unforeseen event of the last decade was rapid widespread acceptance of birth control and a consequent drop in the nation's birth rate. The lower birth rate altered population projections which affected the projected GNP and a wide range of related economic forecasts including inflation. Severe weather conditions, such as the drought this current year, have an effect on the plight of migrants. Such is the precarious nature of long-range forecasting that one or two events or trends can so completely invalidate a projection. To predict the needs of migrant children in the year 1980 is to project the effects of poverty in the year 1980, and there is little evidence that the conditions of poverty which currently characterize the "migrant life" will be any different then than now. In the following pages, a rationale is presented for the above admittedly somewhat pessimistic conclusion. The rationale and related comments have been organized around the seven behavioral domains within which migrant students' needs have been previously detailed.

Background Domain

The needs of migrant children which may prove most resistant to intervention over the next five years are those related to background characteristics. Migrant children exist in a mobile world which includes poor housing, poor prenatal care, poor

nutrition, inadequate health care, and limited cognitive stimulation — all of which interact to insure inequality of developmental opportunity. The Delphi respondents conclude that the same conditions which now characterize the "migrant life" will also prevail in 1980, and as a consequence, the high incidence of inequality of development opportunity among migrant children will not moderate.

Social Domain

Increasing integration should provide increasing tolerance of diversity and less social ostracization. However, social behavior is a response to the way individuals view themselves and their competencies. To the extent that migrant children are denied equality of developmental opportunity, social adjustment problems can be expected to continue.

Ability Domain

It appears equally unlikely that the fluid ability levels of migrant students will change in the next five years. However, strong emphasis on concept development in preschool and the primary grades could result in a revised fluid ability of migrant students. Widespread adoption of early childhood education with a multitude of language, social, and other activities would enable youth to build a base of knowledge that they will be able to draw from later.

Self-Concept Domain

Failure in any endeavor provides a setback to one's self-concept, but continuous failures can be permanently damaging. As migrant children experience failure in school, their self-image deteriorates. Our society places great emphasis on academic performance and, as migrant children become more acculturated and assume more of the majority society's values, failure in academic pursuits will take a greater toll on their self-concepts. Daily success and positive feedback are the necessary building blocks of children's self-concepts. All educators, professionals, and paraprofessionals need constant training to become sensitized to the migrant student's way of life and self-worth.

Achievement Domain

Migrant students perform relatively more poorly as they advance in their schooling. This trend holds special significance to educators in attempting to provide more attention to older youth. All migrant students need assistance in overcoming deficiencies in reading, language, and mathematics. Programs aimed directly at preschool and primary grades that provide a multiple-component, early intervention strategy hold the most promise for equalizing development opportunity for migrant children.

Gross Motor Domain

Research has shown that poor nutrition is causally related to gross motor retardation and that without more comprehensive health and nutrition programs, the gross motor needs of migrant children will remain unaffected. Moreover, other factors, such as ingestion of toxic chemicals like pesticides, may be related to gross motor retardation and are likely to be at least as prevalent in 1980 as they are now. It is also highly improbable that physical education curriculums will change significantly in the next five years, but these curriculums should be expanded to include health and nutrition studies.

Fine Motor Domain

In comparison to the Gross Motor needs, the Fine Motor needs are less pronounced, but there is no reason to believe that these needs will not continue to exist at approximately the same level for the next five years. Once again, nutrition and health factors should provide substantial assistance in enhancing understanding and development in this behavioral domain.

Educational Needs Emerging by 1980

In all probability, migrant children in 1980 will have the needs identified in these reports. These needs will be

intensified by increasing self-awareness on the part of parents and child of their rights and entitlements under the law and public programs and the efficacy of taking positive action to improve their lot.

A major objective of many public programs for migrants is to provide them with the knowledge, skills, self-esteem, and physical health necessary in making a meaningful choice in determining their future. Those programs will hopefully have some impact to influence more and more families to "settle out." The educational system must prepare migrant children for job opportunities for higher skill levels within agriculture as well as in other industries.

Among the educational needs of migrant students in 1980, therefore, will be the following:

- Need for early intervention and follow-through in the health area
- Need for functional literacy, job training, and career education
- Need for nutrition education
- Need for self-concept enhancement in all areas of life
- Need for developing achievement in reading, mathematics, and language (encouraging bilingualism)

CHAPTER 4

CONCLUSIONS AND RECOMMENDATIONS

In summary, the panel felt there would be some changes in the present structure which could affect the migrant family. These would include (a) changes in present government structures, (b) the addition of some new programs, (c) further development of rural areas, (d) streamlining of services presently available to migrants, (e) minor (but no major, dramatic) societal changes occurring by 1980, and (f) the probability of migrants encountering more suffering should the country enter into post-affluence.

Though most of the predicted changes would be small in scope, it was felt by the majority of the panel that the impact to migrants in general would be significant. Some of these proposed changes, such as the passage of a minimum guaranteed income, would commence on a small scale and increase in scope with the passage of time. In its initial stages, a program such as this one might not provide services to migrants. It might be necessary for interested parties to lobby on behalf of migrants for inclusion into this type of program. The panel, however, felt the new administration would be more receptive toward migrant needs than past Administrations. It is important to note that the present Administration has broken with past tradition of appointing party leaders or business executives to fill high level policymaking positions. Instead there are a

large number of minorities, women, environmentalists, and non-party activists. This will mean that unlike the past, the present Administration will be directed by those who believe in the programs and have a stake in improving them.

The panel had the following recommendations for the State of Arizona with regard to the improvement of services to migrant children:

- Commence the change process necessary to meet the new challenge of innovative Federal programs.
- Increase the implementation of long-range planning at the State and local level.
- Strengthen ties with the Federal agencies and the Four Corners Regional Commission
- Fortify all linkages with minority and farmworker organizations to obtain constant feedback at every stage of policy change.
- Take the lead in promoting the improvement of conditions for migrants in the hope that the public sector will follow suit.
- Concentrate on improved data collection regarding the needs and characteristics of migrants. Make certain these identified needs are recognized by all key decisionmakers in the State.
- Focus on the quality of services as opposed to quantity as has been the practice in the past with some programs.

-- Provide for the integration of services which would impact the migrant family as a whole.

— Develop strategies which are compatible with the rural way of life so that this rural nature is enhanced rather then dissipated.